Clinical Lectures ON LOCOMOTOR ATAXIA.

Delivered at the National Hospital for the Paralysed and Epileptic,

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PHYSICIAN TO THE HOSPITAL.

LECTURE I.[1]

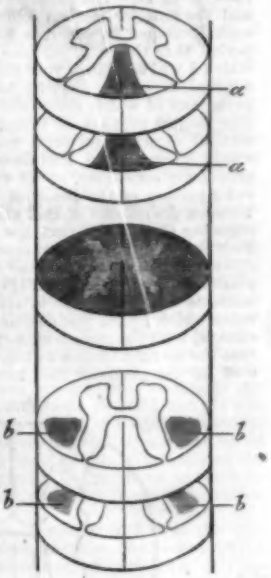
WE had lately the opportunity of examining after death the spinal cord of a man who had suffered for the last year of his life from complete paraplegia. His paralysis was due to destruction of the essential elements of the cord in the mid-dorsal region brought about by a sharp angular curvature of the spinal column. Sections of the hardened medulla, stained with carmine, which I have prepared, exhibit important changes under the microscope, as you will presently see. But before describing these, it may be well to refer to a few points connected with the anatomy of the spinal cord.

The spinal cord, I may remind you, consists of an irregular cylinder of grey matter (roughly represented on horizontal section by the letter H), imbedded in white substance, much as the wick of a candle is enclosed in the composition. The grey matter is composed of ganglionic nerve-cells and nerve-fibres, and the white substance consists almost entirely of nerve-fibres. Not all, but a very large majority of these fibres, take a longitudinal direction, so that when you cut the cord across they are seen under the microscope as circles of varying diameter with a central dot. This dot is the axis-cylinder (the essential element of the fibre), and the circular line defines the limit of the myeline in which the axis-cylinder is enclosed. But besides the nerve-fibres and cells (which may be called the parenchymatous elements) there is a quantity of interstitial fibrous tissue in the cord forming a network, the use of which appears to be to transmit the capillary bloodvessels to the substance of the cord, and to hold the more delicate nervous elements in their places. This connective tissue surrounds the cord outside beneath the pia mater, and penetrates into its substance at various points, breaking up into meshes of increasing fineness, in which the nerve-fibres and cells are included. Indeed, its office, as it appears on cross-section, is not very unlike that of the fine brass wire which forms little *cloisons*, or cells, for the reception and support of the enamel upon the well-known metallic vases of Japan.

Now, in the cord which was destroyed in its mid-dorsal region, you will observe some very important changes. In the first place, at the point where it was most damaged the nerve-fibres no longer present any axis-cylinders, and the ganglionic nerve-cells are altered in appearance; and, in the second place, the connective tissue has increased enormously, so much so, indeed, that instead of being subsidiary to the nerve elements, it now tends to monopolise the section. The changes are the result of chronic inflammation of the spinal cord, to which the term myelitis (μυελός marrow, ιτις) is applied. And because grey matter and white are indifferently merged in the destructive process, which involves, as you will see, the whole transverse section, this myelitis is termed *diffuse*.

If we make transverse sections of the cord at various points above and below the part affected with this diffuse myelitis, we find that changes of a similar kind, as seen under the microscope (especially increased growth of connective tissue and destruction of nerve-fibres), extend to each extremity.[2] In the cervical region, however, as well as in the lumbar region, they are no longer diffused over the whole section, but are concentrated in certain definite tracts. Downwards these changes are seen to occupy, in the lumbar region, the posterior portion of each antero-lateral column (*b*, *b*); upwards they are limited, in the cervical region, to two bands which border the posterior fissure (posterior median columns or columns of Goll, *a*, *a*). If we make various sections we find similar appearances in each. The term "sclerosis" is applied to this alteration of tissue; and because the changes run, as you see, in different bundles of fibres taking a longitudinal course, the condition is called "fasciculated sclerosis."

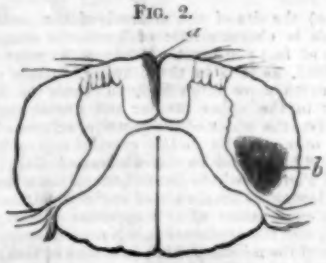
FIG. 1.



A similar effect is well known to be produced by a destructive lesion of a certain portion of the brain-substance (I need not here describe it in detail), from which degenerative changes of the kind described may be traced downwards through the crus cerebri, pons, and medulla oblongata, into one of the anterior pyramids. The fibres of the anterior pyramid for the most part, as you know, cross over to the opposite side of the cord, but it has been shown by Flechsig that a varying proportion of them descend (without crossing) on the same side just at the inner edge of the anterior column bordering the anterior median fissure.

In Fig. 2, which will stand for a section of the cord in its lower cervical region, *a* represents these *direct* pyramidal fibres, and *b* the pyramidal fibres which have crossed over from the left side of the brain to the right side of the cord.

FIG. 2.



Now, it is important to remark that whilst (as shown by this latter instance, as well as by the former, Fig. 1) chronic myelitis or sclerosis follows a *descending* course in a system of fibres in the antero-lateral columns, it takes an *ascending* course in the system of fibres constituting the posterior median columns. Why should this change—systematic myelitis it is sometimes called—travel downwards in the one system and upwards in the other? Türck, who, I believe, first described these changes, explained their occurrence by reference to the law established by Augustus Waller in regard to degenerations of nerve-trunks after section. Waller, you will remember, made the extremely important observation that if the anterior root of a spinal nerve were cut through, the nerve-fibres thus separated from the cord degenerated right down to their remotest periphery. If, however, the posterior root were cut through between the cord and the ganglion upon the nerve, it was now not the peripheral but the central portion of the nerve which degenerated, that part which lay between the point of section and the cord. The spinal ganglion thus appears to perform the office of a trophic centre for the sensory nerve, whilst the spinal cord does the same for the motor nerve. According to this view, then, the fibres in the antero-lateral columns, which have been picked out by the degenerative process, would have their trophic centres above, and those of the posterior median columns would have theirs below.

[1] The substance of the lectures as delivered has been rearranged and broken up into several short lectures for convenience of publication.

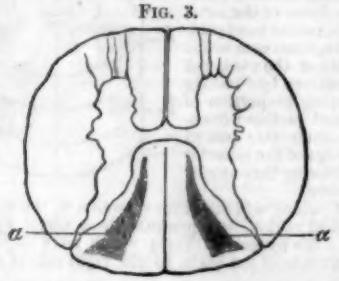
[2] Important lectures by Professor Charcot on the subject of these secondary degenerations are now in course of publication in *Le Progrès Médical*.

You must remember, however, that a centre of this kind is hypothetical, and we cannot indicate its position.

For the rest the mode of development of the spinal cord will probably help to explain the distinctness and independence of various strands of fibres which pathological anatomy thus indicates. The columns of Goll, the lateral columns, and the anterior median columns (according to Pierret) are each developed by separate points and at a somewhat later period than the outer portions of the posterior columns to which I will now draw your attention. The posterior root of a spinal nerve, on arriving at the cord, divides into two parts, one of which enters the posterior horn and the other (the larger) consists of fibres, which take a more or less vertical direction on their way to the grey substance. It would seem, indeed, that these fibres of the posterior roots practically constitute, at all events to a great extent, the outer portion of the posterior column—the part which lies between the column of Goll and the posterior horn. In consequence of this the part has been called by Charcot and Pierret the "posterior root zone."

Now, it is not only in those columns which you have seen picked out by degeneration (Figs. 1 and 2) that fasciculated sclerosis may occur. It is also found in the posterior root zones which I have just described to you. The same kind of change, with the same tendency to travel, is found to constitute the essential lesion in locomotor ataxia, and to have its seat in the posterior root zones. In Fig. 3 you will see

FIG. 3.



marked (at *a*) the site of the sclerosis of the posterior root zones, which is characteristic of locomotor ataxia. But as a matter of fact you must not expect to meet with the change limited, as it is in the drawing, to this situation. You will much more often find, in cases of locomotor ataxia, that in the upper lumbar and dorsal regions the change involves the whole of the posterior columns from one horn to the other, whilst in the cervical region it may be almost entirely confined to the columns of Goll. It is to Charcot and Pierret, whose investigations into the morbid anatomy of locomotor ataxia are of world-wide renown, that we owe the explanation of this apparent anomaly. They have shown, and the explanation is generally accepted, that the sclerosis of the middle portion (columns of Goll) is really a secondary degeneration consequent upon the systematic myelitis beginning in the posterior root zones of the lumbar region—a sclerosis secondary to a sclerosis. I have called your attention already to the sclerosis of the columns of Goll, which takes an ascending course as a consequence of diffuse myelitis of the dorsal region, and here we have again a degeneration in the same columns, taking a similar ascending course as a result of a destructive change in the outer part of the posterior columns. This change—viz., the sclerosis of the posterior root zones,—which is, as I have said, to all intents and purposes the essential lesion in locomotor ataxia, is generally supposed to be a primary one. Whereas, as we have seen in the two instances adduced, the change in the columns of Goll is evidently apt to occur as a secondary degeneration, the alteration of similar character in the posterior root zones is considered to be independent of a previous lesion—to be, in fact, a primary change. (In both cases, I should say, it is supposed that the change commences in and is propagated by the essential nerve element, not by the connective tissue.) There appears to me, however, to be some clinical evidence to suggest the probability that the change in question is at least not unfrequently a secondary affection, and that it commences in the connective tissue.

Let me add that, besides the appearance described as found post mortem from locomotor ataxia, there are usually others. The pia mater shows evidence of chronic inflammation; it is usually thickened and adherent to the diseased portions of the posterior columns. The posterior roots also are seen to be atrophied between the cord and the spinal ganglion, but not, according to Vulpian, beyond the ganglion. Other changes, too, are found, upon which I need not now dwell.

These, then, are probably the most important anatomical features of a disease for the practical recognition of which we have been first indebted to the late Dr. Duchenne (de Boulogne), whose monograph upon it must ever retain its place amongst the classics of medical literature. For the symptomatology of the affection in its typical form, one cannot do better than quote from the definition given by Duchenne in the last edition of his work.[3] "Progressive locomotor ataxia," he says, "is characterised—1. By an overgrowth of connective tissue (sclerosis) of the posterior columns of the cord to a greater or less extent. 2. During an early period by a paralytic strabismus (paralysis of one or more motor nerves of the eyeball); by atrophy of the optic disc, and morbid conditions of the pupil; by special, pathognomonic pains, lancinating, lightning-like, tearing, deep-seated, with cutaneous hyperæsthesia of the skin circumscribed to the seat of pain—each pain not lasting more than a few seconds. 3. During a second period by disturbance of co-ordination and equilibration equally characteristic, localised in the lower extremities, extending to the upper limbs during this period, aggravated by darkness, but occurring even when the patient can help himself with his eyes. 4. By a feeling of weakness whilst standing upright and walking, which is manifested at the same time with the troubles of motor co-ordination and equilibration, and which contrasts with the integrity of the force of individual movements. 5. By loss of sensibility in different degrees (analgesia and anæsthesia of the skin and parts beneath it—that is to say, of the nerves, muscles, osseous and articular surfaces), anæsthesia which increases the disorder of co-ordination and equilibration, but is not necessary for its production. 6. By functional troubles of the genital organs, of the bladder and intestine (impotence or satyriasis), micturition and defecation difficult or impossible. 7. Lastly, by the slow and fatally progressive development of all these morbid phenomena, and by their manifestation usually in the order described."

Now it is to be remarked that the *ἀταξία* (*disorderliness*) from which the disease has acquired its most commonly employed title, whilst it may be a very prominent feature, is by no means a constant one. It is often absent for a considerable time, and it may never occur, or it may be so slight as to be recognised with difficulty. This name therefore tends to mislead.

The term Tabes dorsalis, first applied to the disease by Romberg, seems to me better because it simply describes a broad physical feature observed after death—a shrinking of the cord, especially in its dorso-lumbar portion. So you will understand that when I speak of "tabes dorsalis," or "tabes," I mean to signify the disease more commonly known as locomotor ataxy.

Of this disease I propose to show you several examples. On the present occasion the patient who is shown is a typical instance. Others, which you will see later, have been selected as representing various phases of the disease, which are liable to give rise to more or less error in diagnosis. Tabes is more widely spread than is commonly supposed, and the mode in which it is often masked constitutes on of the most interesting subjects in pathology.

The patient, C. B——, aged forty-one, came here last December, with symptoms of locomotor ataxia, and although he has in some respects improved, his disease cannot fail to be recognised at a glance. In walking his feet are widely separated, with the toes turned out; and it is evident, from the serious attention which he gives to the process, that it is no longer entirely automatic with him. He never takes his eyes off the ground; his steps are uneven in length, and the natural rhythm of walking is wanting, so that, even without seeing him, if you heard him walk along a passage you would recognise the peculiarity. The fore part of the foot is flexed sharply upwards, sometimes even more than once, whilst the leg is making the step, and then as often as not the heel comes upon the ground with a stamp. This gives a look of insecurity to his walk, which is greatly increased when he turns round. If he places the feet close together, thus narrowing the base upon which he stands, and closes

[3] L'Electrisation Localisée, Paris, 1872.

his eyes, he totters to and fro, and would fall but for help.

In picking up an object from the table the hand is usually first projected past it, and then you see one or two fingers suddenly over-extended when you would expect them to be flexed. When the hand is closed as often as not he has failed to grasp the object. There is some cutaneous anæsthesia of his legs and arms.

For several years he has suffered from what he calls "rheumatic" pains—pains in the legs and arms, and occasionally a dart through the head. He describes the pains in his limbs as "excruciating." They are sudden, and last perhaps a second or two. He has them in paroxysms, which have often kept him awake all night, and they are sometimes so bad that he has cried with them. He has lately had a sudden scalding or twitching sensation in the perineum, over in an instant. At times he has had double vision, and on one occasion there was ptosis of the left upper eyelid, which lasted some weeks.

His legs occasionally give way in walking. When he came here there was not much loss of power in his legs, but they are not so strong as they were. His pulse is quick. The pupils of the eyes are small, and do not contract to light. They do contract, however, during accommodation of the eyes.

There is total absence of the patellar tendon-reflex in each knee.

The consideration of some of these symptoms and their value for diagnostic purposes is reserved.

ABSTRACT
OF A
Clinical Lecture
ON
BIGELOW'S OPERATION FOR STONE.

By THOMAS SMITH, F.R.C.S.,
SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

GENTLEMEN,—I am happy to have an opportunity of bringing before you a case now in the hospital on whom I have performed that operation for stone to which we give the name of Bigelow's operation. The proceeding is a new one, founded on principles different from those which have hitherto guided us in the performance of lithotrity, and it is possible, or, rather, highly probable, that it will entirely reform our practice in the treatment of stone in adults.

And, first, I would have you understand what position the operation of lithotrity occupied as a curative measure before Professor Bigelow introduced his proceeding. Lithotrity was used on adults, and for those stones which, if of an oxalate formation, did not exceed one inch in diameter, while in a general way it was pushed somewhat further in the case of those whose calculi were of a softer kind, either lithic acid, lithates, or phosphates; these stones might be crushed even if their longest diameter measured as much as two inches. Stones of larger dimensions than those I have mentioned were generally treated by lithotomy. Of course other circumstances than the age of the patient and the dimensions of the stone have to be taken into consideration in choosing between the two operations, but as these do not bear directly on the subject we have under consideration to-day, I shall not refer to them here.

The object in view in lithotrity has been at all times the removal of the stone with as little damage to the patient as possible, and in pursuit of this object certain rules have been laid down by professed lithotritists, and generally acted on by surgeons. Thus, in speaking of the operation and referring especially to the use of the lithotrite in a fresh case at the first sitting, Sir Henry Thompson, whom I have already quoted, says:—"The mere sojourn of an instrument in the bladder is a source of irritation precisely corresponding to the time, within certain limits, it continues there; anything, therefore, that will diminish the time of the operation and the amount of movement and concussion will necessarily give a greater prospect of success." And, again: "As a rule, then, at first commence with one introduction of the lithotrite, crushing four or five times during a sojourn of, say, two minutes in the bladder."[1] As regards the after-treatment, Sir Henry Thompson tells us:—"You should not encourage the early passing of fragments. They rest at the bottom of the bladder, and I usually keep the patient in bed and pretty much on his back for thirty-six hours or so afterwards; he should, at all events for that period of time, pass urine in that position, so that the sharp angular fragments are left at the bottom of the bladder, and are not forced into the urethra." The object of this delay in the passage of fragments being that they should, by remaining for a time in the bladder, become somewhat water-worn, and so less likely to irritate the urethra.

Mr. Cadge, who from his experience can speak with more authority than any other provincial surgeon, thus expresses himself on the same subject:[2]—"In common with all English lithotritists, it has hitherto been my habit, at the first sitting, to do but little with the instrument, not knowing what the tolerance of the bladder may be, and at subsequent sittings to act more freely. I have of course met with cases, though they are rare, in which one sitting has sufficed to bring about a cure; more frequently there have been five or six, sometimes ten or twelve, and occasionally fifteen or twenty sittings, depending in a great measure on the size of the stone and the power of the patient to void the débris. Speaking generally, the chief principles of English lithotrity, as taught by Brodie and subsequent writers, are first to do as little as possible with the instruments, especially at the first sitting, leaving the extrusion of fragments as much as possible to natural efforts; and, secondly, to use small rather than large instruments."

You may gather from these statements that in the performance of lithotrity instrumental injury was more dreaded than any harm that might arise from the irritation of fragments of stone within the bladder, and that the removal of a moderate-sized stone from the bladder by lithotrity was a process prolonged generally over some days, and not rarely running into weeks.

It is right that I should here tell you that it has recently been a growing habit with surgeons, since the use of anæsthetics in the operation, to remove after a crushing such fragments as could be washed away with this india-rubber apparatus which I here show you. It is called Clover's bottle, having been invented by the gentleman whose name it bears. Its object is to remove well-comminuted fragments after an ordinary lithotrity, where the lithotrite may have been used four or five times, and for this purpose it answers well enough; but it is not adapted for the rapid removal of comparatively large fragments of pulverised stone in considerable quantity.

Professor Bigelow's operation is founded on different principles, and necessitates an entire change in practice. He maintains[3] that the bladder is comparatively tolerant of the presence in its interior of smooth, polished instruments of a large size, even for a considerable time, but exceedingly intolerant of the rough and angular fragments of a broken stone. Thus the object of Professor Bigelow is, if possible, to crush and remove stones at one sitting, believing that the advantage of complete evacuation of fragments is cheaply purchased by an operation prolonged, it may be, for an hour or more. His operation, then, is planned for rapid and complete crushing and immediate evacuation of the fragments, and it has already been applied successfully to stones of far larger dimensions than a prudent lithotritist would have ventured to attack by the old operation. He employs a strong scoop-lithotrite, with a very wide female blade, so constructed that it can scarcely entangle the mucous membrane of the bladder within its blades if used with ordinary care, and having in the female blade an opening just beneath the spur of the male blade, which prevents the instrument from becoming clogged with the débris of the stone, and admits of a thorough pulverisation of the stone without withdrawal of the lithotrite; for you must know that an ordinary scoop-lithotrite, used on a moderately soft stone, soon becomes so choked with débris that the blades will not close, and the in-

[1] Sir H. Thompson: Diseases of Urinary Organs, Fourth edition, p. 188.
[2] THE LANCET, vol. i. 1879, p. 473.
[3] Litholapaxy, by H. J. Bigelow, M.D Boston and New York, 1878.

strument has to be withdrawn. Bigelow's instrument is said to clear itself in its working, and not to need withdrawal on account of clogging.

For the rapid removal of fragments, Bigelow uses a series of large-sized catheters, running up to No. 20 English scale. These are, as you see, straight, having an eye close to the extremity, well rounded off at its margins, and being exactly the size of the lumen of the catheter. The catheter is connected with this, the exhaust bottle, by means of india-rubber tubing, and is removable at a bayonet joint. The india-rubber exhaust bottle, you will observe, is much stronger than Clover's, and has a glass trap for fragments attached to it below, also fitted with a bayonet joint. The bottle is worked in the same manner as Clover's; being compressed it distends the bladder with water, and on the removal of pressure its elastic recoil sucks out the fragments of stone.

[Here followed a description of the manner in which fragments were sought and removed.]

I now give you the history of the patient on whom you have seen me operate. The notes were taken by Mr. Kendall, his dresser.

Removal of four ounces of vesical calculi by Bigelow's operation, in two sittings.—J. B ——, admitted on Nov. 25th, 1879, under Mr. Smith's care, into Henry ward (a patient of Mr. N. Clifton's), is a well nourished man, sixty-nine years old, and has been for many years a sergeant in the police force. About twenty years ago he noticed that he did not pass his water so freely as he had been accustomed, but this did not cause him uneasiness. About nine years ago he was very much troubled by an uncomfortable pressing feeling at the neck of the bladder. This uncomfortable feeling continued till it became pain in the above situation. About twelve months ago the patient began to suffer from incontinence, which continued for a short time, and then ceased. Three or four months after, however, he again began to suffer with incontinence, which has increased to such an extent that he is obliged to wear a urinal. He complains that his water runs freely from him, and that he has no control over it. He suffers most incontinence at night, and urinates best while lying on his right side. About five or six weeks ago he noticed that his urine was becoming turbid, and as it continued to become more muddy, and the feeling of pain at the neck of the bladder was increasing, he consulted a surgeon, who passed a sound, and thought he detected the presence of a stone. On the withdrawal of the sound the patient bled a little. He has resided for many years in Islington, and has been accustomed to walk about without inconvenience. He experiences no inconvenience when riding in an omnibus or in a railway carriage. He complains greatly of incontinence and a frequent desire to micturate. He is unable to pass water while standing. He tries to pass urine about three times in an hour. He passes it involuntarily while in bed. Urine, sp. gr. 1010, acid, no albumen, no phosphate; his urine is drawn off every morning and tested.—Nov. 26th: Mr. Smith passed a sound, and detected what he took to be phosphatic deposits.—28th: His urine is still acid, and contains much sediment. He was placed under gas and ether for twenty minutes, and Mr. Smith washed out his bladder with Bigelow's apparatus; about three ounces (dry weight) of stones were removed.—29th: The patient is very well, and feels no ill effects from the operation.—Dec. 4th: His urine is still acid, and contains much sediment; there is much incontinence. He usually passes about a pint and a half of water during the night. He was placed under gas and ether for about twenty-four minutes. Mr. Smith introduced a lithotrite and crushed some stones; he afterwards washed out the bladder; about an ounce (dry weight) was extracted. To facilitate the introduction of a large catheter the meatus of the urethra was enlarged by an incision downwards.—5th: The patient passed a good night, and feels no ill effects from the operation; is up and about the ward. Temperature normal.—8th: The patient is discharged. He is able to micturate while standing up, and no longer complains of incontinence. Urine acid; very little sediment. The stony matter consists of round small calculi and fragments, which appear to have been composed of similar stones. One of the calculi on section shows a round nucleus surrounded by concentric laminæ. On analysis, the concretion was found to be composed of uric acid in abundance, calcium, magnesium, ammonia (a trace), phosphates (a trace).

Here we have a man in his seventieth year, with more than four ounces of stones in his bladder, suffering from incontinence of urine, leaving the hospital four days after operation in comfort and cured, for the time at least, leaving not only his stone behind him, but his incontinence of urine.

You may observe that though I acted on Bigelow's principles, I did not use his catheters or his lithotrite; I could not procure his instrument, so I used the lithotrite I thought I could employ most to the patient's advantage—a scoop-lithotrite, which was changed for a fresh one each time it became clogged by fragments. The catheter I used for the removal of the fragments was essentially Bigelow's, with a short curved beak to facilitate its introduction in my hands; its size was No. 16 English scale. The first sitting lasted in all twenty minutes, and during that time I was employed a quarter of an hour; in the second sitting, six days later, the patient was half an hour under the influence of the anæsthetic; the washing and crushing taking twenty-five minutes. He suffered no inconvenience of any kind from either operation, and the only blood seen was that which flowed from the incision of the orifice of the urethra at the second operation.

You may think that because on the first occasion I did not remove the whole mass of stones I did not follow out Bigelow's principles; but I would have you observe that the stones and fragments of stone were not of my making. His bladder had become to a great extent used to their presence, and I did not press the operation, as I judged that my proceeding, even if incomplete, would certainly diminish rather than increase the irritation, by diminishing the number of fragments in his bladder, and to that extent relieve his symptoms. As the patient was in the habit of passing small fragments of stone, I deemed it most prudent to remove first with the evacuating apparatus such fragments as would pass without the use of the lithotrite, and then to crush any stone or fragment that might remain behind.

I would draw your attention to the calculous matter removed by the operation. It weighed, when dry, more than four ounces, and consisted of globular stones of all sizes, from the size of a nut (these have been, of course, broken by the lithotrite) down to stones not larger than No. 5 shot. A countless number of these little stones have undergone spontaneous fracture in the bladder, their superficial layers splitting asunder and their nuclei escaping and looking like empty husks. This is a subject that has been studied by Dr. Ord, who attributes the spontaneous rupture of urinary stones to the central part of the stone being of different constitution from the external part; that the central part, containing mucus or other colloid capable of becoming swollen in an alkaline fluid, may burst the external laminæ on the urine changing from an acid to an alkaline condition. The stones in this case are chiefly composed of uric acid in combination with lime and magnesia.

We are not yet in a position to judge accurately of the value of Bigelow's operation as a curative measure; the materials for forming a sound conclusion do not yet exist, at least in a form available for comparison; but I will tell you of all the cases of which I can find a record. They are included in this statistical table; they are twenty-eight in number. Dr. Bigelow gives twelve in his book, and he refers to three others; Mr. Cadge[4] publishes five; Mr. Teevan[5] and Mr. Coulson[6] each one; Mr. Buckston Brown[7] three; Mr. Reginald Harrison[8] one; and I myself have operated on two patients, in each case most successfully—twenty-eight cases in all, with one death. The stones in several of these cases were of such dimensions that, but for Bigelow's operation, the patient would have been subjected to lithotomy. The largest recorded stone removed by the operation has been in one case of Professor Bigelow, where the fragment weighed 1802 grains, and the greatest amount of calculous matter, consisting of whole and broken stones, removed by the operation, has been in the case of one patient on whom you saw me operate; here the fragments weighed 1920 grains.

Though the mortality among these cases has been low, it is probable that some instances where the operation has been less successful remain unpublished. And I would particularly direct your attention to the fact that it is not the mere death-rate of the operation that we want to ascertain. We must let a little time elapse, and, if possible, get some record of the condition these patients are in after the removal of their stones—whether their symptoms are removed, relieved, or

[4] THE LANCET, vol. i. 1879, p. 471.
[5] Ibid., vol. ii. 1879, p. 687.
[6] Ibid., vol. ii. 1879.
[7] Ibid., vol. ii. 1879, p. 611.
[8] Ibid., Dec. 13th, 1879.

aggravated; for you must know that while lithotrity can be frequently credited with real cures both of the stone and its symptoms, cases do occur in which the irritation set up by the lithotrite gives far more trouble to the patient than his original stone.

It is of great importance to surgery—that is, to those patients who may suffer from stone—to decide which are the principles that should guide us in carrying out a case of lithotrity; those that have hitherto been followed by the leading lithotritists or those advocated by Professor Bigelow.

On the lines we have hitherto followed, the operation has achieved a fair success, I cannot say a brilliant success; but to whatever point we may have arrived in diminishing the mortality, the limit of progress has probably been reached on the old lines. If, however, Bigelow's practice be founded on truer views of the whole subject (as it seems likely that it is), the domain of lithotrity has been greatly enlarged and a real advance will have been made in the treatment of stone in the bladder.

ABSTRACT
OF A

Clinical Lecture
ON

THE EXPRESSION OF THE FACE AND THE EXTERNAL APPEARANCE, AS AN AID TO DIAGNOSIS AND TREATMENT.

Delivered at St. George's Hospital, Nov. 17th, 1879,

BY T. WHIPHAM, M.B., F.R.C.P.,
PHYSICIAN TO THE HOSPITAL.

GENTLEMEN,—In the present age of mechanical and scientific discovery there is a natural tendency (unconscious, doubtless) to disregard older methods of diagnosis, which, in the absence of the stethoscope, sphygmograph, thermometer, &c., were the mainstays of the physicians of bygone ages. Two or three of the more prominent features in the case were, for the most part, the guide of our predecessors in their diagnosis and treatment, such as the expression of the face, the position assumed by the patient, or the pulse. Far be it from me to say that you should in any way discard the invaluable mechanical aids which we are so fortunate in possessing to-day. What I would say, and what I would impress strongly upon you is this, that the methods employed by the old physicians are just as valuable as ever they were, are just as true as ever they were, and consequently ought to receive just as much consideration in the investigation of disease as ever they did. Our modern appliances doubtless amplify older methods of diagnosis, and by their aid alterations in the condition of internal organs are revealed, and in many instances actually demonstrated, which in past generations remained unnoticed or misunderstood. Thus the ear is rendered more capable of discrimination by means of the stethoscope; the touch, upon which the appreciation of the pulse solely depended (the appreciation varying with the acuteness of the sensibility and education of the physician), is supplemented by the sphygmograph, and so two of the special senses are brought to bear upon any departure from health which may exist in the heart or bloodvessels; the thermometer measures accurately variations in temperature which were once but roughly estimated by the hand. So valuable are these modern appliances that we are tempted to rely on them perhaps too much in our investigation of disease. We are not so far wanting in good sense as to despise any or either of them; but we are, I trust, sufficiently enlightened to look upon them as accessories to our art; to regard them as aids to, and not substitutes for, the special senses given to us by nature; to recognise the fact that more information may frequently be gained in one moment by the eye or the touch than could be obtained after much toil by scientific instruments.

The object which I have in view to-day is to direct your attention to the very great value which attaches to the expression of the face and the general appearance of the patient in the diagnosis and treatment of disease. It has been said, and often said, that any physician who relies solely upon such external manifestations draws conclusions from insufficient data, and is therefore very liable to err. Granted. But I would add that he who neglects such prominent landmarks is equally liable to wander from the path which leads to correct diagnosis, or at all events reaches it too often by a needlessly circuitous route. Furthermore, I would insist strongly upon the fact that a due appreciation of the external manifestations of disease may relieve the patient of a protracted examination as to the condition of his internal organs—a matter of no slight importance if he be already much exhausted by his malady. In illustration of my meaning, let me bring to your notice one or two cases which have lately been under our observation in the hospital.

A girl aged twenty-three was admitted into Roseberry ward on Oct. 30th, 1879, with high temperature (101° F.), quick pulse, coated tongue, constipation, a sharp but somewhat anxious expression of face, and with an eruption of herpes on the lips.

Now we have of late had in our wards an unusual amount of enteric fever, and, as so often happens, many of these cases commenced with constipation. Without wearying you with minor details, I may say at once that after careful examination no physical signs of pulmonary disease could be detected in this patient, and that the diagnosis lay between enteric fever and pneumonia.

It has been stated, I think by German physicians, that herpes labialis never accompanies enteric fever. I need scarcely remind you that it is extremely prevalent in pneumonia, and that its occurrence, together with high temperature, rapid breathing, &c., render the diagnosis of that disease extremely probable. These symptoms in the present case, although the physical signs of the disease were at the date of the patient's admission absent, led at once to the exclusion of the fever, and to the presumption of pneumonia. Two days later dulness on percussion and tubular breathing on the right side rendered the suspicion a matter of certainty.

Again, on the same day, a girl aged eighteen was brought to me by a relative who was under my care in the Throat department. She had been ailing for nine days with headache and giddiness; her bowels had not acted for three days; her tongue was red at the tip and edges, but otherwise coated with a thick browniah-white fur. As her temperature was above 104° Fahr., she was at once sent to bed. Examination of her chest failed to reveal anything abnormal, and there was no eruption on the body. Her expression was dull and heavy, and she lay in her bed in a state of semi-stupor, with half-closed eyelids.

I confess that on my first examination of this patient on the evening of her admission I failed to recognise the disease from which she suffered, and it is because I failed to read what was written in her face in tolerably clear characters, that I am induced to urge upon you to-day the necessity for a careful study of the face and general appearances in all cases which come under your observation.

Let us for a moment contrast these appearances in the two cases just related. In the former we noticed the bright though anxious expression, the rapid respiration, the eruption of herpes on the lips; in the latter, above all, the dull heavy look. The senses, as Sir Thomas Watson so happily expresses it, "lose their natural delicacy."[1] The condition in this last case was that known as "febrile depression," in which, to quote again from the writings of that great physician, "the expression of the face is dull and heavy, absent, puzzled, its hue thick and dusky. The patient presents very much the appearance of a person made stupid by drink."

Now, although there were several symptoms, such as high fever and constipation, common to the two cases, it was the appearance of the face rather than anything else which in the former case led to the diagnosis of pneumonia, and in the latter (after a few hours' consideration) to that of continued fever, an opinion which was three days later confirmed by the characteristic eruption and other symptoms of enteric fever. Our suspicions in each case were excited by the facial aspect, and time eventually confirmed them. I might multiply instances of this difference in the facial expression in disease. I might contrast the injected eyes and startled look of encephalitis, or the pinched but unnaturally bright

[1] Vol. ii., p. 796, ed. 1857.

countenance of tubercle, with the stupid appearance of fever. The two cases already mentioned are, however, sufficient to illustrate the importance of such a general inspection in all cases of disease. I do not say that it is *always* possible to make even an approximate diagnosis from general inspection, but it is no little gain, gentlemen, if we are by this means, in some cases, able to state to the patient's friends the probability or otherwise of his having contracted an infectious disease. While, however, we obtain by this general inspection a certain insight into the nature of the malady before us, we gain from it, perhaps, quite as much assistance in our treatment of the case. And again I will take fever as an illustration of my point. It is familiar to you all that in severe cases of continued fever depression may be extreme, and perhaps the commencement of this depression is better indicated by the expression of the face than even by the quality of the pulse. Sir Thomas Watson exactly describes this condition of muscular weakness, to which I would direct your attention, when he says that the patient "sinks down in the bed." Prostrate, helpless, without the power or the inclination to move, he lies utterly regardless of all that is going on around him. Such depression, however, is not peculiar to fever; it occurs also in other acute diseases, and is especially remarkable when pericarditis supervenes upon an attack of rheumatic fever. It is an extremely grave symptom, inasmuch as it indicates at once that the patient's strength is failing, that our efforts must be directed to the support of that strength. It is under such circumstances that alcohol plays so important a part in fever, and if I can point out to you even one indication for its administration my remarks to-day will not have been in vain.

One case is worth a multitude of precepts; I will therefore call your attention to a patient now lying in No. 4 bed in Williams ward, a man aged thirty, who was admitted on October 3rd, 1879, with enteric fever, and who had a relapse on the thirty-second day. During the primary attack there were no unfavourable symptoms, but on the eighth day of the relapse at the time of our visit we found him "down in the bed," apathetic, with increased duskiness of face and a somewhat anxious expression of countenance. It was at once evident, apart from indications afforded by the quality of the pulse, that the man's strength was failing. Examination of his chest revealed nothing abnormal in the condition of his lungs, a suspicion of which was excited by the increased duskiness of his face. Without altering his medicine (bark and sulphuric acid) and without increasing his diet of beef-tea and milk, I ordered him five ounces of brandy. The effect was immediate, for the next day the face had in great measure lost its dusky appearance, and the patient was in all respects brighter and stronger.

I do not for an instant wish you to suppose that the administration of alcohol was not indicated otherwise than by his external appearance; but I do maintain that outward inspection of this man as he lay weak and prostrate at once suggested stimulating treatment, and, I had almost said, without the necessity for further examination.

ONE YEAR'S SURGICAL OPERATIONS IN THE WESTERN INFIRMARY, GLASGOW.

BY ALEXANDER PATTERSON, M.D.,
SURGEON AND LECTURER ON CLINICAL SURGERY.

AT the meeting of the British Medical Association held in Cork, in the month of August last, Mr. Savory, of St. Bartholomew's, delivered a most eloquent and interesting address on the Prevention of Blood-poisoning in the Practice of Surgery. In the course of his address he made some pointed remarks regarding the absence of statistics from those who practise Lister's method. With much diffidence I take up the glove, and, in the following short paper, shall endeavour to give, on a limited scale, one year's operative work, carried through on the antiseptic principle; and by that is here meant, the Listerian plan of treatment without any change or fancied improvement. Three small surgical wards, always kept scrupulously clean and thoroughly ventilated—two for males and one for females,—on the upper floor of the hospital, are placed under my charge. The beds number only nineteen, although frequently they contain twenty patients.

The following is a list of the operations, performed on resident patients only, during the twelve months extending from October 31st, 1878, till November 1st, 1879.

Summary of Operations on Resident Patients.

Nature of Operation.	Number.	Deaths
Osteotomy	32	—
Lithotomy	3	—
Herniotomy	5	2*
Taxis	2	—
Ovariotomy	4	1†
Ligature of arteries	2	—
Amputation at hip-joint	1	1‡
" thigh	3	—
" ankle	3	—
" upper arm	1	1§
" forearm	1	—
Excision of knee-joint	1	—
" elbow-joint	2	—
" cervical tumours	6	—
" mamma	6	—
" mammary tumour	2	—
" epithelioma	5	—
" sarcoma	1	1‖
" osteoma	3	—
" uterus	1	1¶
" tumours of scalp	2	—
Cyst of labium pudendi	1	—
Tracheotomy	1	—
Large abscesses and sinuses opened	16	—
Removal of dead bone	14	—
Radical cure of hydrocele	2	—
Hæmorrhoids removed	5	—
Fistula in ano	8	—
Vesico-vaginal fistulæ	3	—
Castration	4	—
Plastic operation on perineum	1	—
Closure of vagina	1	—
Tenotomy	4	—
Joints opened	2	—
Circumcision	1	—
Dislocations	4	—
Harelip	1	—
Resection of fracture	1	—
Uterine polypi removed	2	—
Condylomata removed	1	—
Attempted closure of artificial anus	1	—
Removal of cuboid and part of astragalus	2	—
Operation for contracted mouth	1	—
	162	7

No case of erysipelas occurred during the year, and since the wards were opened, four years ago, there has not been a single case of pyæmia.

In addition to the above, there were 162 persons treated as out-door patients, upon whom 86 operations were performed without any unfavourable result. Many of these under the old plan of treatment must have been taken into the house, thus taking up beds required for graver cases. Want of space compelled us, and the antiseptic treatment enabled us, to treat them as out-door patients. This fact is of very great importance, and is one of the greatest advantages of the Listerian method.

From Oct. 31st 1877, till Nov. 1st, 1878, there were:—

In-door patients admitted	234
Operations performed	119
Deaths	6

And the first five items were as follows (*Glasgow Medical Journal*, July, 1879):—

	No.	Deaths.
Nephrotomy	1	0
Osteotomy	6	0
Herniotomy	5	0
Ligature of femoral	3	0
Amputation of thigh	9	1

* Collapse. † Peritonitis. ‡ Shock.
§ Operation performed for very acutely destructive disease of elbow-joint in a girl of nineteen. Vomiting set in soon after operation, and continued until death, four days afterwards. Sank exhausted. No post-mortem allowed.
‖ Shock. Large tumours over spine in infant.
¶ Prolonged shock and exhaustion.

REMARKS.

Herniotomy.—The cutting operation for strangulated hernia I have performed seventy-nine times, and have always opened the sac. We can never be certain that adhesions do not exist within the sac, nor can we form an accurate opinion as to the state of the intestines. In a case of small, acutely-strangulated femoral hernia, we may have gangrene in half a dozen hours, whilst in an old protrusion strangled in an old man (oblique inguinal, I mean) as many days may possibly elapse, and yet the bowel may retain its vitality. It is never the operation, when properly performed, which kills the patient, but the delay which takes place in seeking assistance.

Osteotomy.—In the thirty-two operations forty compound fractures were made, and Mr. Savory will admit that neither he nor any of his colleagues has had the good fortune to treat in one year so many compound fractures without some untoward complications. No doubt the patients' ages ranged from ten to thirty-one years, the best period of life for recovery from injuries, and no doubt also there was little or no injury done to the soft parts. Still the fact remains that nearly all those limbs were put up immediately after the operation, and never disturbed or looked at for some weeks, when bones and skin-wounds were found united, the dressing not being once changed. Many compound fractures from accident can be treated in a similar manner; and will any surgeon venture to affirm that a mode of dressing which ensures perfect rest to the fragments from the beginning to the end of the case, which does away with all constitutional disturbance, and which ensures the patient from all risk of erysipelas or pyæmia, is not superior to any plan of treatment hitherto practised?

Vesico-vaginal fistula outside the vagina.—The patient, a married woman, aged forty-nine, suffered for years from prolapsus of the pelvic viscera, for the support of which she had been recommended to wear a metal pessary. This she continued to wear for about a year, when pain in the lower part of the abdomen compelled her to remove it, and on doing so the protrusion at once recurred. On examination a curious state of matters is presented; a tumour larger than a child's head hangs between the thighs; the growth has a covering like skin, with patches of ulceration here and there, while on its anterior aspect there is to be seen a transverse opening an inch and a half in length, through which urine constantly trickles. On introducing a catheter by the urethra, instead of passing up behind the symphysis pubis, it turned downwards in front of the tumour, and its tip could be passed out of the opening. On introducing the finger into the rectum, it was carried down the posterior side of the mass, thus showing that the entire protrusion consisted of the rectum behind, the bladder in front, with the uterus between. The pessary had eaten its way through the posterior wall of the bladder. The fistula was cured by two operations, and by another the edges of the vaginal orifice were pared, after returning the protrusion, and brought together by deep and superficial sutures. Union was entirely satisfactory.

Removal of uterus for fibro-cystic disease.—Mrs. B——, aged thirty-two, observed for the last five years a gradually growing tumour in the abdomen. During the last twelve months the growth has increased more rapidly. On opening the abdomen, a tumour, not unlike a football in size, shape, and appearance, presented itself. To the touch it gave the idea of a very thick-walled cyst containing fluid, and was adherent to the parietal peritoneum, nearly ascending to the border of the liver, also glued to the small intestines, while below it sprang from the uterine mass by a pedicle as thick as the forearm. The cyst was tapped, giving escape to a quantity of glairy fluid, after which, the globular shape being still retained, the trocar wound was enlarged, the hand introduced, and the semi-solid contents broken up and removed. The pedicle was then transfixed, tied, and severed close to the enlarged uterus. The latter was now observed to be filling the true pelvis, and was jammed in the transverse diameter of the brim. By placing the hand on the anterior and posterior, I was enabled to rotate the uterus slightly and to draw it upwards, then to transfix and divide the thickened cervix. In dressing the case, I employed for the first time Dr. Keith's drainage-tube, and much regret that I was unfamiliar with its management. It was removed on the fourth day, and probably taken away too early. The poor woman made a hard and prolonged struggle for life. Her temperature never rose above 101°; as one of my colleagues said, "she had not strength enough to get up a temperature." She died on the eighth day, and post-mortem examination revealed only very slight traces of inflammation in the neighbourhood of the abdominal wound, while about an ounce of blood-clot, *entirely unchanged*, lay in the bottom of the pelvis. She appeared to have died from prolonged shock.

Ovariotomy.—In the fatal case many adhesions existed, and death occurred from peritonitis.

Tracheotomy.—This case occurred in an infant thirteen months old, who, when creeping along the kitchen floor, contrived to lay its hands on a phial containing a small quantity of oil of vitriol, of which it sucked apparently only a small portion, when it dropped the bottle. The mother found the child lying in great distress, with face red and congested, struggling for breath, and attempting to vomit. A few hours after the accident it was taken to the infirmary, and tracheotomy performed by my late assistant, Mr. T. B. Adam. The case progressed favourably, and, as the baby was able to swallow next morning, it seems probable that none of the acid passed into the œsophagus.

Dislocations.—One of the dislocations was the rare posterior displacement of the humerus with the head of the bone lying on the dorsum of the scapula, below the spine. It was of six months' duration, and the head of the bone could be seen distinctly from behind, and felt rotating under the hand on moving the arm about. The patient, a child a trifle over six months old, held its arm a little from the side and carried forwards; the hand was so turned that the palmar surface looked backwards, exactly in the position in which a swimmer places his arm and hand when giving the stroke. The movements of the arm in relation to the body were very free, the hand always tending towards pronation. The arm could not, without difficulty, be carried backwards beyond the middle line of the body, and the upper arm was, of course, shortened. Reduction was effected with comparative ease, but after six weeks' trial the head of the bone always returned to its abnormal position. Dr. KNOX, one of my colleagues, gives in the *Glasgow Medical Journal* for this month, a most interesting account of two cases of the same rare variety of dislocation which came under his notice within a period of three months at the dispensary.

Removal of cuboid and portion of astragalus.—This operation was performed in strongly pronounced talipes varus, for which the tendons had been twice cut, and boots worn for some years with little improvement. The operations were successful, and, small as they may seem, would not, I am inclined to think, be readily undertaken by those who follow the old method of treatment.

Statistics for the twelve months:—

Patients admitted	280
Operations performed	162
Deaths	7
Death-rate per cent.	4·3
Days resident in hospital of each patient	24·7
Percentage of operations to each bed ...	8·7
Beds	19
Cost of wine and spirits for each patient per annum	7½*d.*

The total number of operations performed by the four surgeons of St. Bartholomew's for 1878, with their results, according to the Report, are—

Operations.	Deaths.	Death-rate.
458	44	9·6

Omitting "for various reasons" as Mr. Savory does in his address, operations involving the peritoneum, the results are as follows:—

Operations.	Deaths.	Death-rate.
416	22	5·28

Dr. Patterson's wards in Western Infirmary, twelve months:—

Operations.	Deaths.	Death-rate.
162	7	4·3

Leaving out "for various reasons" the peritoneal operations, we get—

Operations.	Deaths.	Death-rate.
150	3	2

I shall not refer to the quantity of stimulants consumed in St. Bartholomew's further than to say, that some time ago the registrar was written to, asking for a few details on this and other matters, and hitherto no reply has been vouchsafed.

Operations per bed per annum.—Let anyone conversant with hospital work think for a moment of the difference as to the probability of blood-poisoning occurring in St. Bartholomew's, where so few operations are performed in proportion to the number of beds, and where erysipelas and pyæmia prevail, compared with small, crowded wards, containing only nineteen beds, with frequently fifteen to seventeen cases operated on in them. All former experience would lead us to expect epidemic outbreaks of blood-poisoning in the latter, yet they never appear.

As Mr. Savory issued the challenge, he will, I trust, pardon me remarking that the antiseptic system has enabled one, with only nineteen beds under his charge, to perform more than one-third as many operations in twelve months as the entire surgical staff of St. Bartholomew's Hospital in the same period, with nearly four hundred beds at their command.

Taking into account the number of operations, the low death-rate, the number of beds, and the small quantity of stimulants used, as a year's operative work, the foregoing has probably never been surpassed in any general hospital. The credit must be ascribed to a system of treatment which enables us to perform operations and to achieve results of which our predecessors never dreamed—a method of treatment which has revolutionised surgery, and which entitles its author to rank among the greatest benefactors of our common race.

India-street, Glasgow.

THE HISTORY OF MENTAL MEDICINE.

Epitome of an Introductory Lecture to the Clinical Course on Mental Diseases, delivered Nov. 16th, 1879,

BY B. BALL,

PROFESSOR OF THE FACULTY OF MEDICINE OF PARIS.

(Concluded from p. 9.)

WE must now go back. As a historian of ideas I have not attempted to follow a chronological order, and in setting face to face the two most diametrically opposed doctrines, I have for a moment let the origin of our French school dwell in the shade, that school which has so long dominated science, not only in France but throughout the world. It is time now to return to it; it is time to analyse the principles at the base of our education, to trace the progressive deviations which have insensibly separated us from it, and to ascertain, lastly, the point which we have reached, and with this study this lecture may conveniently close.

Esquirol and Pinel—these two ever-inseparable names—convey with them to posterity the same ideas, the same system; the master is perfected in the pupil, the philosopher in the clinician, and in spite of a few differences in detail, there is complete harmony on all fundamental points between these two minds, so well fashioned to understand and to complete each other. When one, for the first time, runs through Pinel's treatise, which had only two editions—it was not a literary success you see—one asks how this small work could have brought about so profound a revolution. It is because behind the book there was a man of truly superior mind and of an eminently sympathetic character; a man, in fine, endowed with that precious faculty of forming pupils which constitutes the rarest and noblest means of reaching posterity. It is above all with regard to the treatment of the insane, it is on the humanitarian and practical ground, that the labours of Pinel opened up a new path. The middle ages had an instinctive repulsion for all madmen; when it could not burn them for sorcerers it dreaded them as possessed, and maltreated them as such. The 18th century, freed from the superstitious terrors of preceding epochs, was still under the influence of these vulgar prejudices, which formerly inspired our fathers with so profound an antipathy towards the insane, and, without wishing to ignore the feelings of humanity that do honour to a few of the ancients and many of the moderns, we must admit that Pinel seems to have been the first alienist to have really entertained feelings of affection for his patients, the first to have understood that in spite of their deep misfortune they had not fallen below human worth; and in this regard the great reformer was truly the man of his time, for at the moment when the abuses of ancient society were disappearing on all sides, swept away by a storm-wind, he caused the powerful breath of the French Revolution to penetrate into the domain of mental medicine.

But by the side of the philanthropist there existed in Pinel a physician full of tact, wisdom, and good sense. It has been said, and repeated to satiety, that Pinel struck off the chains from the insane; it is too often forgotten that he rendered them a no less important service in delivering them from phlebotomy, and in preventing them from dying of hunger. Excess in bleeding and insufficiency of food were, in fact, together with the abuse of coercive measures, the chief causes of the pitiable state in which he found the insane, and it will be his eternal honour to have worked in this respect a profound and radical revolution.

But although the practical and medical side outweighs all others in Pinel's work, there is to be found in it a theoretical side, forming a veritable code of mental alienation, and this code, modified in some points by Esquirol, is that which still governs us to-day, for it was long before one could depart from it without running the risk, not only of living under the ban of heresy, but also of passing for an ignoramus, which is infinitely graver. This doctrine may be summed up in a few fundamental propositions:—

1. Insanity, properly so-called, is absolutely distinct from the delirium of acute diseases.

2. There are no anatomical lesions in insanity; those which are met with sometimes are the consequences and not the causes of the disease.

3. The great remedy for diseases of the mind is sequestration, isolation. Ordinary measures applied to the diseases of the affected region only play a very secondary part.[1]

4. The alienist should apply himself to the clinical study of mental diseases, but by following the processes of the psychologists, and by applying the process of medical observation to lesions of the understanding.

5. Lastly, the importance of a methodical classification should be one of the chief preoccupations of the author of a philosophical nosography, who has carried into psychiatry notions borrowed from natural history.

Mania, melancholia, dementia, were the forms nearly universally admitted. To these Pinel adds idiocy, without using this word in the sense we nowadays attach to it. Esquirol completes the series by the creation of monomania, and the system was thus definitively founded.

During many years the doctrines of Esquirol and Pinel have had the power of law, especially in France, and three generations of alienists have arisen under their protection. But the onward march of the human mind could not be indefinitely arrested, and the majestic edifice which has so long sheltered us seems to-day to be subsiding at all points. It was with the anatomists, as might have been expected, that the reaction began. The almost absolute denial of material lesions could not fail to meet with contradictors, and, not to mention the memorable ire of Broussais, researches based on most positive foundations came to destroy one of the fundamental bulwarks of the system. In 1816 Rostan begins at la Salpêtrière his studies on cerebral softening; he finds himself surrounded by a valiant band of active, enterprising young men, the most celebrated of whom were Georget, Falret, and Calmeil; at the same time Bayle was entering at Charenton under the auspices of Royer-Collard; meningitis, chronic encephalitis, are ardently studied, and there is soon seen produced the most important scientific event of the century, in psychiatry at least—I mean the discovery of general paralysis. And yet the authors themselves of this great discovery remained profoundly orthodox; general paralysis apart, it was understood that other kinds of insanity did not admit of any lesion; and they proceeded so far in this path that Georget, going beyond the ideas of his masters, declared one day that no form of sympathetic insanity existed, suppressing thus with a single blow one whole series of physical causes of mental alienation. You have been able to measure the progress which since then has been made by the idea of an intimate correlation, of a relation of cause to effect, between

[1] "On doit toujours regarder les médicaments comme des moyens accessoires dont on fait un usage d'autant moins indiscret, qu'on a des vues plus étendues et des ressources plus assurées, dans l'ensemble des autres moyens, moraux et physiques."—Traité de l'Aliénation Mentale, 2nd ed., p. 356. Paris, 1800.

disorders of the mind and affections of organs most removed from the encephalon.

In France, Lallemand was the first to start this movement. The influence of seminal discharges on certain forms of vesania has perhaps been exaggerated by this celebrated author; he has not, however, the less rendered great service in showing that hypochondria, moral prostration, melancholia even to suicide, were sometimes due to this cause. Numerous works, among which we will specially cite that of M. Lisle, have confirmed the ideas of Lallemand, which may be ranked to-day among established truths. Esquirol, it may be said, created puerperal insanity; but uterine affections, the influence of which had already been indicated by Pinel, are to-day among the best recognised causes of mental alienation, as the researches of Guislain, Bazin, and Azam (of Bordeaux) have proved; and uterine insanity is established beyond all dispute. Esquirol pointed out the possibility of a relation between intestinal lesions and insanity; and it was doubtless under the influence of this idea that the great pyretologist, Louis, the creator of typhoid fever, attributed to the lesions of Peyer's patches the delirium so often occurring in this disease. This idea of Louis would not now find many partisans; but the influence of the stomach and intestinal canal on the development of mental diseases is not contested by anyone at the present day. Then follow, in turn, affections of the liver, heart diseases, pulmonary phthisis; we have seen cardiac insanity and hepatic insanity arise; and we seem to recognise to-day that there is not a single part of the economy lesions of which may not bring about psychical disorder in predisposed subjects. The whole of this great movement will be found summarised in the admirable thesis of M. Ch. Loiseau, and in the discussion to which it gave rise at the Medico-Psychological Society.

This is nothing else, it will be said, than a more complete development of the ideas rudimentally shadowed forth by Esquirol and Pinel. But who does not see how the domain of the pure vesaniæ, of insanities without appreciable lesions, is narrowed by this new method of viewing the subject? If to this rapid and necessarily incomplete enumeration there be added the discovery of the ascending course of diseases of the spinal cord towards the brain, transforming ataxics and paraplegics into general paralytics and the subjects of dementia; if modern researches on the composition of the blood, on the state of the pulse in the insane, on the influence of diathesis and of divers physiological conditions on the manifestation of insanity be considered, it will be doubtless understood that the axis of mental medicine has been entirely displaced, and that we no longer gravitate around psychology. Clinicians and observers, as in the time of our great masters, we more willingly direct attention to the diseases of the body than to the perturbations of the understanding; and we no longer consent, to use Falret's expression, to become the secretaries of our patients, and to write under their dictation.

But there are other points on which contradiction is even more radical. The fundamental axiom, the mother idea of the system, is that true insanity is absolutely independent and distinct from the delirium of acute diseases. Now we see one of the leaders of mental medicine, my excellent master and friend, M. Moreau (of Tours), openly express the idea that no radical distinction exists between delirium and insanity, which he even goes so far as to compare to the perfectly physiological facts of dreaming and sleeping; and yet M. Moreau (of Tours) will not contradict me if I rank him among the orthodox; on this point, however—and it is a point of chief importance—he must be classed with the opposition.

Lastly, we have seen in the doctrines of the school isolation held up as the universal panacea, or at least as the first and most important of all measures of treatment. A reaction against the excess of this principle, the exactitude and wisdom of which at bottom it would be difficult to dispute—a reaction the more active because it has been so long kept back—has been showing itself with an ever-growing intensity for several years past. The modern secular establishment of Gheel has been praised; colonies of the insane, family life, have been extolled; it has been even wished to empty the asylums and maisons de santé. Nowhere has this movement taken deeper root than in England, and Blandford, one of the most accredited alienists of the other side of the Channel, expresses the opinion that many patients would be more happily and wisely controlled in their family than in a special institution.

Thus, you see, there is not a single point of the classical doctrine which has not been discussed, retouched, I should say nearly destroyed, in order to be rebuilt. The classification remains, and yet it is the least solid and most questionable part of the work. Certainly the founders of the French school cannot be reproached with having accepted and retained the names of mania, melancholia, dementia, which go back to the very cradle of medicine. Pinel adds idiocy to them; Esquirol, monomania. Each of these divisions may be the object of discussion. But there is a more general consideration dominating the whole of the subject.

One single and same disease, a sole and same lesion, may give rise to all forms of delirium, whilst preserving its own clinical physiognomy and individuality. Let us take, for instance, general paralysis: it is shown by ambitious insanity, by melancholia, by furor, by hypochondria, by dementia, by intellectual prostration; and yet it always remains general paralysis, and no practised observer will ever experience the least hesitation on this point. Then there are patients who, by reason of cerebral lesion with which they are attacked, do not come under this category. I will assert this of the subjects of alcoholism, of epileptics and hysterics. Is it not plain that these different phenomena of excitation and depression are but symptoms, sometimes permanent, sometimes transitory, and liable to alternation as in circular insanity? If, now dipping into details, we try to discuss each one of the forms of delirium within which it has been desired to circumscribe mental alienation, the insufficiency of such a classification will strike you much more vividly. Let us take that group of different psychical states described under the name of *mania*. Here is one patient in a state of extreme agitation, talking, vociferating, restless, incessantly expectorating; he utters volubly words without sequence; every moment he is repeating the same phrases with breathless and jerking utterance; this man, whose condition seems so near to acute delirium, is a maniac. But I see another patient, whose intellect, instead of being abolished, is manifestly more active than in the normal state; he has a prodigious memory, a remarkable facility of elocution, and the surprising readiness of his conceptions is linked to a morbid activity, to a great disorder of action. He also is a maniac; but how can he be allied to the preceding one, and who would dream of maintaining that both these subjects were attacked with a single and same disease? Other maniacs will exhibit to us a predominance of melancholy ideas; others will offer the spectacle of an intermittent or periodical mania; others, lastly, will be attacked with a double form of mania, and will have regular alternations of excitement and depression. How can affections so diverse be united in a single and same category, and what advantage can be gained from this forced alliance, either from the standpoint of science or from that of instruction?

Criticism would be yet easier with regard to the lypemania of Esquirol; it will suffice us to remember that, thanks to M. Baillarger, we now know that melancholics must be divided into two very distinct groups—the one representing depressive melancholia, sadness, with stupor, and without predominating ideas; the other, of those who in the midst of their sad delirium, preserve great mental activity, and do not show the least tendency to stupor. They are evidently not the same patients. A separate place must equally be claimed for the anxious melancholics, for the "groaners" of Guislain and Morel, who walk about incessantly, up and down, like souls in purgatory, all the time repeating the same phrases. There remains, lastly, conscient lypemania without delirium, which could not be confounded with any of the preceding varieties.

We reach now monomania, one of the most disputable and most disputed of the creations of Esquirol. I shall not stop to discuss whether there exist limited partial deliriums or not, or if it must be said, with Heinroth, "insanity is a disease of the entire being." I shall content myself with telling you that monomania, already greatly compromised by the discovery of general paralysis, received its *coup de grâce* when M. Lasègue created the delirium of persecutions. Read indeed, or rather re-read, Esquirol's work on Monomaniacs, you only find them paralytics, persecuted and impulsive subjects; these three categories once substracted, if there remain a residue, nothing would justify the endeavour to reserve for it a separate place.

Not even dementia itself, when thrown into the crucible of analysis, escapes dissolution and evaporation therein; in fact, a great part of those formerly styled demented are only in reality subjects attacked with organic cerebral dis-

cases: general paralysis, softening, cerebral hæmorrhage, tumours, cerebral syphilis, each furnish their contingent. As to the acute dementia of Esquirol, it belongs, since M. Baillarger's work, to melancholia with stupor. The ordinary dementia of the insane is only in reality a chronic delirium, and most frequently a delirium of persecution.

There remain, then, at the bottom of the crucible, only the incoherents; they form, indeed, a residue of slight importance; their number is very small relatively to that of the other insane, and moreover when we dip beneath the surface, we nearly always discover traces of an old delirium still persisting.

If the classification of Esquirol and Pinel errs in what it contains, it errs yet more in what it does not contain. There are not to be found there the delirious fevers, so rich and varied, which belong to the convulsive neuroses, nor those resulting from great diatheses, which amongst their direct manifestations include such marked intellectual troubles; nor alcoholism and toxic insanities, which in the present state of our civilisation play a more and more important part; nor, lastly, the great family of hereditary insanities, which constitute at the present day one of the most natural groups in the order of mental diseases. Doubtless the influence of the majority of these causes was recognised, and it found a place by the side of moral causes, to which these illustrious observers always assigned the chief place; but they never dreamt of forming special groups of them, nor of according them, so to speak, an independent existence. It may be even added that this mode of view would have been radically opposed to the general principles which they always enforced in subordinating, in their system, the physical phenomena to disorders of the intellect and feeling. Doubtless it would be extremely unjust to reproach these great men with not having done what no one at their epoch could do; they largely profited by acquired knowledge, they liberally increased it, they drew therefrom conclusions which it was then possible to draw. They were of their time; we should no longer be of ours did we think absolutely as they did. What need to hide the imperfections of their work? It is amply sufficient for their glory, and the glory of their country.

If I have tried, gentlemen, to bring to light the weak side of *la théorie classique*, it is not certainly with a view to propose another to you. We live in an epoch of transition, when no one could attempt such an enterprise without exposing himself to certain defeat; but in showing you the work which has been done in psychiatry during half a century, I have been faithful to my *rôle* of historian, and I have tried to give you, in a rapid sketch, the physiognomy of the time in which we live. Its contours can readily be traced. One of those irresistible currents which it is impossible to sail against is carrying us to seek everywhere for physical lesions, material causes of mental alienation. Doubtless there is not made twice in a century such a discovery as that of general paralysis, but we are forced more and more to narrow the field of insanity without lesions, and we succeed in it undoubtedly in a certain measure. On another side, the advances of physiology, which nowhere have been more rapid than in that which concerns the nervous system, have revealed to us the immense part played by automatic phenomena in all the functions of the economy, and more especially in intellectual life. The terms "cerebral automatism," "unconscious cerebration," are the expression of quite an entire series of facts of vast importance, which are destined to play a great part in psychiatry.

There is another province of our domain which at the present day attracts more sustained attention than ever, I mean morphology. Among the great observers who, from antiquity, have busied themselves with mental diseases, there is not one who has not perceived the importance of the form, size, and anomalies of the encephalon, but the imperfection of knowledge then offered a nearly insurmountable barrier to progress, and it was only in the case of idiots, imbeciles, and the degenerate that this study yielded any serious results. At the present day many distinguished minds, amongst whom I am happy to name M. le Prof. Broca and my old friend Dr. Luys, are applying themselves to these questions with great ardour; to-day when anthropology is founded and a more penetrating analysis than ever tends to acquaint us, even to the smallest details, with the encephalon of all the human races, it is permitted to hope that mental pathology will, in its turn, be able to find in this order of ideas what morbid anatomy has proved powerless to give it.

Lastly, the greater and greater preponderance of heredity in mental alienation leads us to consider insanity in a large number of its tributaries as "a disease that is ending," and not as a disease that is commencing—as a primordial vice of conformation of the intellect, rather than as the result of an accidental crisis; and thereby we only develop one of the most just and fruitful ideas of the masters of the French school.

It is, however, very nearly certain, or, in the language of the mathematicians, it is certain that it is probable, that, in spite of all our efforts, there will always remain an irreducible quantity in the problems of mental alienation, and that complete light will never be shed on all its depths.

But it does not behove me here to assume the part of the prophet, and my *rôle* of historian is finished. Let me, then, sum up in a few words the conclusions which seem to me to flow from this rapid excursion through the ages. They may be reduced to three principal points. In the first place, respect for our ancestors. By appreciation of the difficulties of the subject, we come to understand the worth of their efforts and the greatness of the services they have rendered us. In the second place, devotion to clinical observation. Do we not see that in all epochs the great observers who have studied mental alienation have left us imperishable pictures which will remain eternally true, whilst time has done justice to the different theories which have in succession disputed for the preponderance? Let us labour, then, to observe well; let us be clinicians above all, and in that way shall we be the legitimate heirs of Esquirol and Pinel. Lastly, scepticism; and I do not mean by that that morbid frame of mind which makes us receive all new conceptions with a vulgar irony, and which would become in the long run more destructive to the true interests of science than the most childish credulity. I mean by scepticism that negative virtue which consists in never accepting a fact without verifying it, an idea without discussing it, and which teaches us to yield only when the laden mind comes to bend beneath the burden of proofs; then, but only then, one yields, but with the conviction of not having surrendered to the impulse of imagination, and of being subdued only by truth. In undergoing this discipline one runs the risk of not marching at the head of his age; but one has at least the advantage of not mourning for those hypotheses whose birth is so rapid and whose life is so ephemeral.

Such are, gentlemen, the principles I would have enter your minds, and they will govern all my teaching. I do not disguise from myself the difficulties of the enterprise, but I enter on it with confidence, sustained by the sense of duty, and knowing beforehand all the sympathy which you are accustomed to accord to willing men.

CASE OF SUPRAPUBIC LITHOTOMY.

BY WILLIAM PAUL SWAIN, F.R.C.S.,
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ELIZA G——, aged ten, was admitted into the Royal Albert Hospital on July 21st, 1879. Her symptoms were first noticed fifteen months ago, when her mother discovered that she had incontinence of urine. It was found that she was in the habit of passing a hair-pin into the vagina, probably on account of pain and irritation; and on one occasion she told her mother that a hair-pin had slipped up out of reach, but as one was afterwards found in the chamber vessel, it was supposed that no pin remained in the bladder or vagina. She had considerable pain, and four months later a swelling appeared a little above and to the left of the pubes. She now came under the care of Mr. Hutchison of Camborne, who detected a stone in the bladder, and an attempt was made to crush the stone, but without avail. About eight months ago the swelling broke and discharged, and the pain diminished greatly after this; but a sinus was left through which urine and calculous matter occasionally passed. The incontinence of urine has continued throughout.

On admission, she presented the appearance of a full-grown and well-nourished girl. She looked healthy in the face, complained of but slight pain, and said she felt very well; temperature normal; tongue clean, but a little flabby; pulse soft and weak; bowels acted regularly; urine escaped continually and involuntarily. On examining the abdomen,

there were, above and a little to the left side of the pubes, two sinuses admitting a probe some distance inwards and downwards towards the bladder, but not leading to anything definitely. The sinuses discharged slightly, but no urine seemed to come from them. On examining the bladder with a sound, and on passing the finger into the vagina, a calculus was felt in the bladder, apparently of large size.

On July 24th, under chloroform, the urethra was first dilated with the blades of a pair of urethral forceps and with the finger. A large lithotrite was then placed on the stone, and an attempt made to crush it, but the screw failed to act owing to the blades being too far apart, on account of the size of the stone. The lithotrite was withdrawn, and on further examination with the finger in the bladder, the points of a hair-pin were felt penetrating the coats of the bladder on the left side. It was decided to open the bladder above the pubes. An incision, about two and a half inches long, was made in the median line from the pubes upwards, and the parts dissected through till the bladder was reached, all bleeding vessels being secured on the way. The bladder was then fixed with a hook and opened, a pair of forceps introduced, and the stone caught. The main part was withdrawn with the hair-pin running through it; a large portion of the stone at one end crumbled down, and the fragments were removed with a scoop. The wound in the bladder was now closed with four or five interrupted catgut sutures, and one or two vessels in its coats were tied. The edges of the wound in the abdominal walls were brought together with catgut sutures, the sutures being passed through the entire thickness of the muscles and integuments, as in the operation for ovariotomy, and a drainage-tube inserted. The operation was done under the carbolic spray, and the wound dressed antiseptically.

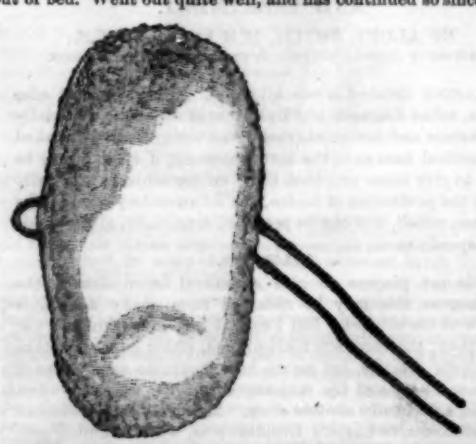
July 26th.—Recovered well from the chloroform, and appears bright and cheerful; has had very little pain, no sickness, or bad symptoms of any kind. Temperature 99·5°. The urine has continued to run away by the urethra, and apparently has not been blood-stained. Wound dressed, as the dressing became urinous.

During the next nine days she continued without a bad symptom; the wound being dressed from time to time, under the spray, and the drainage tube gradually shortened.

On August 6th the wound, which had continued closed throughout, was found all but healed, a small sinus, which the piece of drainage tube still kept open, remaining below. The sinuses, which had never discharged since the operation, had very nearly closed up; she had almost regained the power of retaining the urine. Her temperature the last two nights had been 101·2°, but in every other respect she seemed exceedingly well and bright.

14th.—The wound and sinuses quite healed; very little urine now escapes involuntarily. Temperature still continues above normal, 100° to 101°; but otherwise she appears perfectly well.

20th.—She is apparently quite recovered, and has full control over her urine, which is acid and clear; she has been out of bed. Went out quite well, and has continued so since.



The woodcut represents the calculus in its entirety; the points of the hair-pin are shown in the position in which they were found in the bladder, penetrating its coats to about one inch and a half.

Devonport.

ON SOME POINTS IN THE DIAGNOSIS OF PHTHISIS.

BY A. B. SHEPHERD, M.D., F.R.C.P.,
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(Concluded from p. 11.)

I PASS over other collected cases, which, while they would take up too much time, illustrate only the same difficulty, and turn to the records of another master of diagnosis.

Addison[1] has laid down that, "when any form of chronic induration of the pulmonary tissue exists, and especially if attended with dilated bronchial tubes, neither auscultation nor percussion enables us to distinguish such a condition of lung from phthisical disease. If bronchitis be present, and the induration be situated at the apex, the signs are perfectly identical with those of phthisical disorganisation." And he adds, "Our diagnostic resources are to be found in the history and progress of the case, the absence of some of the more ordinary symptoms of phthisis, and some incongruity observable between the local signs and the general aspect and condition of the patient." Again, Dr. Walshe, who in 1848 allowed that cheesy infiltration of a portion of lung may be due to "a fatty transformation of catarrhal and pneumonic inflammation-products, as originally taught by Addison," tells us that "the real difficulty in diagnosis consists in the distinction between certain cases of chronic bronchitis and phthisis, ... especially when dilatation of the bronchi exists;" and some pages further on gives certain marks of difference by which the distinction may be established; at the same time the distinctions asserted in no way contradict the sentence I have just quoted from Addison, representing, I think, most fairly the existing difficulty.

For the difficulty does exist for each one of us. I have made a brief abstract of the notes of a case now under my care in the Victoria Park Hospital, which shows how very nearly it is brought home to myself.

The patient is a labourer, forty-two years of age, admitted into hospital on the 5th of last November, married, of dark complexion, 5 feet 9 inches in height, and then weighing 9st. 5lb. On these last two points it may be remembered that Dr. Brinton in his little book on "Life Assurance" (p. 32), lays down that an adult male in good health, 5 feet 6 inches in stature, ought to weigh rather more than 10st. The patient tells us that since he first became ill, eighteen months ago, he has lost 2 st., which would bring him well above Dr. Brinton's law. The only disease he has had was ague, eighteen years ago. His father is eighty years old, with probably chronic arthritis; his mother is eighty, and healthy. He has two brothers and a sister, all in good health. His present illness began with dry cough and pain in the left side; later the cough was accompanied by expectoration. After violent retching, three months ago, he brought up, he thinks, four ounces of clotted blood, and has occasionally seen streaks since; he has had no night sweats for the last six months, though he had had previously. On admission his pulse is 96; his temperature 98·2° Fahr.; his general functions normal; his finger-nails not curved. There is marked dulness and tubular breathing at the right apex, to fourth rib; intense bronchitis over both lungs. Further notes by my clerk, Mr. Macdonald, to whom I am indebted for what I have read, are these: cavernous respiration and crepitation at right base in front; harsh breathing and small crepitations in supra-spinous fossa, extending to base. On the left side resonance on percussion; harsh breathing and crepitation cleared by cough. All the bronchitic sounds increased; there was from time to time abundant expectoration of greenish or yellowish muco-purulent sputa. Expansion was deficient at right apex, but the vocal fremitus was not altered. The heart-sounds were normal. Not to carry

[1] "On the Difficulties and Fallacies attending Physical Diagnosis in Diseases of the Chest." Guy's Hosp. Reports, series ii., vol. iv., p. 12.

the signs and symptoms further, they were, according to my colleagues, who ordered his admission, and those of my clerks, the signs and symptoms of phthisis. On the other hand, there was the man's history, and, in spite of continued loss of flesh, the look, if I may be allowed to think so, of a patient with chronic bronchitis. But I am bound to confess that my diagnosis is uncertain. I think if he came, as I do not consider he will come, at any rate yet, to the post-mortem table, we should find dilated bronchi and general bronchitis; but I should not be surprised if my colleagues and my clerks were proved to be more right than I.

I do not like to occupy time by comparing with this other cases. The question, of course, arises, have we nothing whereon to make a certain diagnosis? I am very much afraid we have not. There are certain distinctions laid down by Dr. Walshe and others which do give some aid, but that is very little, so far as my experience goes. In the character of the sputa there is nothing, I think, though streaks of blood occasionally, in the absence of any mitral mischief, may support the fear of phthisis. "The more limited the bronchitis, especially if situated at the apex, the greater the probability of its being associated with phthisis; the more general the bronchitis, especially if it affect both lungs, the greater the hope of an exemption from phthisis. The more abrupt the transition from bronchial obstruction to natural or puerile respiratory murmur in the affected part of a lung, the greater the likelihood of phthisis"[2] These and the fact that the tendency of bronchitis is to enlarge, that of phthisis to contract the chest, are possibly our only safeguards. And this contraction or enlargement is, in the main, antero-posterior.

On this latter point I may lay before you two plans of chest area; one, the larger, taken from the patient I have spoken of: the other from a patient with undoubted phthisis. In the first (R. R.) the lateral through measurement is 12¾ inches, the antero-posterior 9½ inches. In the second (J. J.), the lateral 12$\frac{1}{16}$, antero-posterior 7⅞. Between the first measurements is the difference of $\frac{11}{16}$ of an inch; between the second that of 2½ inches. Both are taken at the level of the nipple line. The lung area is decidedly larger in R. R., whose height is 5 feet 9 inches, and weight 9st. 5lb. The height of the phthisical patient (J. J.) is 5 feet 6 inches, and his weight 8st. 11lb. In these two points the two men are fairly comparable.

And now I may be with some reason asked why I spend so much time over a distinction already well-drawn in all the text-books between these two diseases? My answer is, first of all because I believe the treatment by *climate*, especially of the two classes of patient, to be by no means the same; that the sending of a given patient to a certain high region, for example, will depend for the chance of a bettered condition on almost certain diagnosis between the two classes; and, secondly, that the difference and the distinction are often overlooked by some of the most practised among us, as I think the cases I have already quoted from various writers sufficiently prove. And as the result of an inaccurate discrimination, the relief of a bronchitis has led I am sure in no small number of cases to the hasty decision of really phthisical patients, in the absence or in spite of the advice of their medical attendant, to try that same mode of treatment, to their own detriment in the end. As proof of this it is justifiable to take the evidence, not of the medical, but of the general press. In the *Morning Post* of Dec. 26th, 1878, is a by no means feeble or unfair article entitled "A Colony of Consumptives." It covers almost five columns of the newspaper. From THE LANCET I gather that something of the same kind has been published in the *Echo*. The correspondent of the *Morning Post* tells us that in this colony, "on any day half a dozen people of both sexes may be seen skating, who came here a month or two ago with extensive cavities in their lungs; cavities which, according to the local doctors, are fast disappearing" (col. 3.) Lower down the writer says, "the worst of Davos is that the people are always talking of 'cavities' and 'infiltration,' and 'consolidation.'" The loose employment of words which science itself scarcely as yet accurately defines may be but one of the signs of the times, and so far to be defended on newspaper grounds, but it behoves us to decide with ourselves how far this popular knowledge, mischievous certainly in its immediate results, is not the outgrowth of our own want of precision, whether in diagnosis or in terminology.

[2] Addison, loc. cit., 9.

In an article entitled "A Christmas at Davos Platz,"[3] Dr. Theodore Williams tells us that, among other symptoms of improvement in the patients he saw there, "the physical signs in both first and second stage cases of phthisis showed a remarkable diminution of dulness, indicating either the development of emphysema or absorption of pneumonic growth. Contraction of cavities appears to proceed somewhat rapidly here. But the climate seems to tell most on the heart's action, which becomes more and more excited, though, curious to state, the number of cases of hæmoptysis, even in phthisical patients, is very small." This opinion may carry some weight with "the public, who grasp eagerly at any novel idea which holds out any prospect of a cure for this disease."[4]

I may agree to some extent with the writer as to the development of compensatory emphysema, or even as to the absorption of pneumonic products in cases of chronic phthisis. The latter, when it happily occurs, is hardly capable of post-mortem proof; the former, so to say purely mechanical, is certainly a partial, and more or less temporary, relief to the patient. But when it does occur, it again brings the sufferer under the conditions of the persons called in the common language "asthmatic"—under the condition, that is to say, of the man or woman affected with chronic bronchitis and emphysema; and so far, I believe, under the conditions of the patient who has most to gain from the air and surroundings of a place like Davos, that gain being greatest to the marked chronic bronchitic, or to the certainly phthisical patient in whom the existing signs are rather those of bronchitis and emphysema than those of vesicular mischief, whatever be its so-called stage.

To conclude, and at the same time to revert to the first subject of this paper, there is a story told in Sir Astley Cooper's "Life" which ought, I think, to have some interest for, and, so far as I know, may have some bearing on the history of, the Society before which I have the honour to speak. It seems that Sir Astley Cooper[5] was for a long period attached to the Kent Medical Society, which at that time held its meetings at the "Green Man" Hotel at Blackheath. Prevented by increase of professional work from attending, he sent in his resignation, addressed to it by some mistake as the Blackheath Medical Club. Dr. Babington and Professor Coleman proposed, and I suppose the Society unanimously adopted their proposal, that the resignation should not be accepted, on the ground that some other Society than their own must have been intended. The consequence of this very practical joke was that, remaining on the books up to Sept. 1829, he had to pay £43 as arrears of subscription. But it speaks well for the Society, in which he was thus proved to be so popular, that this fine did not prevent him from continuing to be an honorary member of it up to the time of his death.

[3] Brit. Med. Jour., Jan. 4, 1879. [4] Ib., p. 10.
[5] Life, vol. ii., p. 140.

RINGWORM (OF THE HEAD): DIAGNOSIS AND TREATMENT.

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HAVING devoted much attention, during the last nine years, to the diagnosis and treatment of ringworm, especially of chronic and inveterate cases, and being constantly asked by medical men as to the best treatment, I trust I may be able to give some practical hints on the subject; especially as to the production of *kerion*, the inflammatory form of the disease, which, if it can be produced artificially, always ends in a speedy cure.

DIAGNOSIS.

I do not propose to give a general description of the disease, as this may be obtained from many admirable books on the subject. But I cannot help remarking, in the first place, that very few medical men, either in consultation or private practice, are aware how incurable some cases of ringworm are; and the majority consider a case well when it is in a decidedly chronic state. Many boys are presented for admission to Christ's Hospital who, while bringing cer-

tificates from medical men of the highest professional standing that they are cured, are still suffering from a severe form of the disease. I have often found, on inquiry, that an opinion has been formed, and a certificate given, without any special examination of the scalp, and certainly without the help of a lens or microscope. Most practitioners imagine that a ringworm is cured when the hair is growing freely and firmly again on the part affected. This is a great mistake, as some of the most chronic cases are those in which the hair has grown again, but, on close inspection with a lens, some scurfiness and *many broken hairs or stumps will be seen scattered among the new hairs on the patches.*

Speaking from experience, after the examination of a very large number of children, I have found that in the majority of cases where a boy or girl has had ringworm on the head within a year or two of my seeing them, the disease is not cured. As a rule, the treatment has been continued until some new hair has made its appearance, after which it has been discontinued, although many diseased stumps remained. Besides the usual cases I have mentioned, where there are numerous broken hairs to be seen on old patches, I sometimes find that the stumps have been rubbed down by friction, or partially removed by attempted epilation, just before the examination. Under these circumstances, we see numerous follicles, with no hairs growing from them—a most suspicious sign,—and also some black dots. These black dots are the orifices of diseased follicles, in which the stumps have been broken off on a level with the surface of the scalp by friction, or are the orifices, filled with dirt, left by the retraction of the broken and shortened stump into the follicle after attempted epilation.

Especially would I call attention to a variety I call "disseminated ringworm"—one rarely diagnosed, and the most chronic and difficult to cure. The hair is growing freely and firmly all over the head; there are no patches to be seen now, although probably they have existed at an

FIG. 1.

A stump, very full of fungus, taken from a case of chronic ringworm, of nearly three years' duration, showing the rows of conidia, even down to the root, and the appearance of the stump where it has been broken off, frayed out, and some oil-globules.

earlier stage of the disease; the skin appears generally healthy, and perhaps almost free from scurf, but numerous isolated stumps, or groups of stumps, are seen in every direction, often scattered all over the scalp. This variety is almost always overlooked, and can only be detected by very careful examination. The stumps in old chronic cases are very brittle, and almost always break on attempted epilation, showing, after soaking some little time in liquor potassæ, under the microscope a most extensive implication with fungus, even down to the root of the hair. Rows upon rows of conidia, like strings of beads, are seen splitting the substance of the hair, and causing it to appear almost double the ordinary size. Where the disease has continued for a year or longer the whole thickness of the hair seems to be filled with these rows of conidia. (*Vide* diagram.) Cases like this have certainly existed for many months, or, more likely, for a year or two, and may have given the disease to many other members of a family, while all the time they have been overlooked or thought to be well.

But apart from these varieties, some of which are exceedingly difficult to diagnose, I have had children sent to me, certified as cured, when there were *typical patches* existing as large as a five-shilling piece, itching, and covered with very short, broken, dry, and twisted hairs, often of the usual yellow or ash-grey colour, and with fine scurf, evidently showing that some medical men have no idea what ringworm is like; and even when it is explained to them, they affirm that the disease is dried up and cured, and that the child is quite fit to mix with other children.

It is a great mistake to think that ringworm of the scalp usually presents itself as a red spot of a ring-like form, almost destitute of hairs; the appearance of ordinary ringworm of the skin being seldom seen. At an early stage of the disease, there may be only a very small scurfy spot or two, containing hairs more brittle than usual; but as a rule the doctor does not see the case until one or more of the hairs are broken off short. Local scurfiness, without stumps, does not necessarily imply ringworm; but such spots, especially in light-haired children, or if the disease exists in another part of the head, are very suspicious, and must be carefully examined with a lens, and the scurf placed under the microscope. Often a *single* stump will be discovered. General scurfiness or seborrhœa must not be mistaken for ringworm. At other times actual stumps are not seen, but shortened irregular twisted-looking hairs, sometimes lying quite flat on the scalp, and of a lighter colour, which, on attempted epilation, break off and show the usual fungus. Chronic ringworm may also occur in the form of pustular spots, with a stump in the centre. This appears to be Nature's effort to get rid of the stump, and can be successfully imitated by treatment. A very chronic form is also often observed, where there are one or more large irregular patches, often extending nearly all over the scalp. The surface is very scurfy, and very many of the long hairs remain, together with numerous stumps. This variety is sometimes mistaken for seborrhœa or eczema, but can always be diagnosed by the stumps. Cases are even found where the entire scalp is affected.

Medical men should not consider a case to be cured, or certify a child to be free from ringworm, unless they have most carefully examined the whole scalp in a good light, and specially looked at any suspicious spot with a lens, and are certain that there is not to be seen a single stump (or even the black dots before mentioned), giving evidence of the fungus under the microscope. Sometimes it is extremely difficult to detect the stumps when only a few exist; and often the attention is directed to the short hairs round a treated patch (caused by the hair having been cut), instead of to the diseased stumps, which are frequently concealed by the healthy hairs, and only protrude about a sixteenth part of an inch. Stumps are often of a lighter colour than the rest of the hair, and as long as any remain—and they may exist for years—the disease is not cured, and may continue stationary, or spread again, besides giving the affection to other children.

If all the stumps could be extracted by the roots, the disease might be considered cured; but almost always one or more will break off, allowing the root part, which of course contains the fungus in an active state, to remain behind in the follicle, out of which it will not protrude again for a week or two. It constantly happens that a doctor removes, as he thinks, all the stumps from a patch, and certifies the case to be well. But if the place is watched a few weeks the stumps will be sure to appear again; in fact, I consider it *extremely difficult to certify that a child who has had ringworm is absolutely well.* Time after time stumps will crop up here and there, breaking off when an attempt is made to extract them. They may keep on reappearing for months after the case in other respects seems well. Even specialists will be deceived, and after putting a strong caustic on a single patch, and then getting a bald place apparently quite free from stumps, they will certify the case to be well; but after a week or two up come the stumps again, and prove the certificate wrong. Therefore a bald patch should never be considered well until the new

downy hair is growing freely, without any stumps. I would also warn against devoting all one's treatment to one or two patches; for while these are being cured, if proper precautions be not taken, other small spots, where the disease has been overlooked in its incipient stage, make their appearance; and the doctor may find when he has cured the first patches, that he has several more to deal with; therefore, the whole scalp should be constantly examined during treatment. Sometimes, when ringworm is cured, especially after the head has been shaved, there are a few *atrophied* stumps seen. These easily come away entire when extracted; they have small atrophied roots, and show no fungus under the microscope, the ends being sharp cut (from shaving) or blunt, and the shaft being of the normal, or less than the normal, thickness.

In old chronic cases the diseased stumps undergo some fatty degeneration, and thus many small oil-globules are seen in and about the stumps, as well as conidia. Again, small oil-globules on a normal hair or atrophied stump must not be mistaken for conidia. To a practised eye there is no difficulty in diagnosing between atrophied and diseased stumps. The regular, equal-sized, and bead-like arrangement of the bright and circular conidia, with their double contoured outline and nuclear contents on or in the substance of the hair, cannot be mistaken when once seen. Ether will also distinguish oil-globules from conidia by dissolving the former; besides, the fractured, faggot-like appearance of the broken end of the stump is most characteristic.

In diagnosis I place but very little reliance on the fact that the hairs come out easily round a suspicious spot, as they may do so with equal facility all over the head in cases that are not ringworm, and be very firm in obstinate forms of the disease. *A very common error* is to take a long hair close to or from a patch of ringworm, and finding no fungus on it under the microscope, to conclude the disease is cured. It is useless, as a rule, to look for conidia on the long hairs taken from or around a treated patch. The whole attention for diagnosis and prognosis must be paid to the short stumps. I have seen a bald place, purposely made by the hair being pulled out, very much resemble a patch of ringworm, but of course it contained no stumps.

Parents and friends, as a rule, will not credit the diagnosis of chronic cases, nor believe the time the ringworm has existed, and the time it will probably take for its cure. Very many children in private families have this disease without its being suspected. We issue strict instructions that children who have ringworm will not be admitted into Christ's Hospital, and yet the average percentage of boys, during the last five years, that have had the disease unknown to their parents, or thought to be quite well when first brought up for admission, is 8·4.

The following table will show the number of boys (age from eight to ten years) coming up for examination here the first time, and the number of cases of ringworm of the head detected among them:—

—	1875.	1876.	1877.	1878.	1879.	Total in 5 years.
The number of boys examined the first time, supposed to be quite free from ringworm	193	190	174	187	205	949
The number of ringworm cases (of the head) detected	15	20	10	19	16	80
Age 8 to 10 years—Average percentage	..	..	..	..	..	8·4

During the five years many of these boys were examined over and over again, so that in all there were 143 more postponements during this time of boys brought up a second, third, or even a ninth, or tenth time.

With regard to girls, very few have been examined here until within the last few years. In 1878 and 1879 27 girls were examined for the first time, and 9 were found to have ringworm—i.e., 33·3 per cent. During these two years there have been 13 more postponements of these cases, when brought up a second or more times. This average of girls I mention, but I trust it is far above what I shall find in future.

Ringworm occurs among the rich as well as the poor, and in all parts of the kingdom; but it is especially frequent in the lower classes that attend school. I once examined a school of this class of boys, and found more than half of them had ringworm of the head. Without going into the reasons for its being so, I may remark that it appears that the disease is much more contagious among children under ten years of age than it is among those who are older, and it is rarely contracted after the age of fourteen.

TREATMENT.

Ordinary recent cases.—A very excellent remedy is a mixture of carbolic acid (the pure crystals melted) and glycerine, in equal proportions, or one part of carbolic acid to two or three parts of glycerine, according to the extent of surface to which it is applied, the age of the patient, or the effect produced. The glycerine penetrates freely, and carries the acid to the conidia. It is cleanly, seldom painful, and though I have used it most freely the last eight years, I have only once seen any toxic effect produced, and that was when applied for some time to the entire shaved scalp of a child about five years old.

It is best to cut the hair very short with scissors all over the head, or to shave it, except, perhaps, a little fringe back and front to show under the cap, if the patches are at all numerous, or hair cover the scalp. In other cases it is sufficient to cut the hair off the patches, and for half an inch round them. Then, if there are only a few patches, I blister them freely with liq. epispasticus, and after a day or two begin to apply the carbolic glycerine. Blistering large surfaces is very painful, and not without risk, and, in my opinion, is quite out of the question with young children; in fact, carbolic glycerine soon cures such cases.

If the ringworm be so extensive as to require most of the hair to be removed, the carbolic glycerine may be applied to the entire scalp, as strong as it can be borne without causing much pain or blistering; but it is necessary to exercise more caution, using a weaker solution in the case of young children; and it is also advisable to apply it only to a portion of the scalp the first time, and to note its effect.

In employing this remedy, the most important points are to apply it often, say twice or thrice a day, and to have it well rubbed into the places with a sponge mop.[1] Nurses generally shirk this duty; therefore, the doctor must take care that this preparation is properly applied. It will take two or three months at least of this treatment to produce a complete cure, and to get the new downy hair to grow. At the same time, if the remedy be only applied to the patches, a weaker solution, say 1 in 8, must be well rubbed into the entire scalp at night, to insure the destruction of any conidia that may be about, and to prevent the extension of the disease. During the first part of the treatment, the hair should be kept close cut, and any small patches of ringworm should be painted with strong carbolic acid and glycerine (3 to 1 of glycerine), blistering fluid, or glacial acetic acid. The scabs produced by these applications should be removed with forceps as soon as formed—often bringing away with them many diseased stumps,—and the remedy again used.

Children under this treatment should have their heads well washed twice a week at least; epilation should also be freely and often practised with a broad flat-pointed pair of forceps. The majority of the stumps simply break off, but much good is done by even partially removing them, as the carbolic glycerine is able to penetrate better into the follicles. There is no need for caps to be worn during the day, unless all the hair has been removed; but it is advisable to use them at night. The chief use of caps is to prevent the pillow-cases getting saturated, and thus causing irritation of the face by the child lying on the soiled places. I believe the best way is to put a piece of lint or a linen cap, which must be constantly washed, over the head, and then a black silk one, lined with oil-silk, over that.

Carbolic glycerine is a most excellent remedy, yet where there is a large extent of surface involved, I doubt if it is as good as the following. I have used the undermentioned ointment the last year very freely, with excellent results—viz., carbolic acid (pure), strong citrine ointment and sulphur ointment in equal parts. To be made fresh every week. This can be applied without fear, at any rate to children over ten, to the entire scalp every night, and to the patches again the next morning. In children under this age it is advisable to use a double proportion, or even more, of the sulphur ointment. It causes no pain, and is very

[1] These mops can be made by tying a small piece of sponge on to the end of a penholder.

effectual. Of course, in accordance with the rule mentioned above, the head will not have been blistered. A cap should be worn as before described, and the head well washed twice a week, all scabs being removed from the patches. The scabs will turn of a blackish colour, especially if the ointment be used after being made a week, as a sulphide of mercury forms. While using this ointment all over the scalp, I often apply strong carbolic glycerine to the small patches. I have sometimes noticed that this preparation, after being used for a while, causes the stumps to become loose in the follicles, so that they can easily be extracted with the roots. I may mention that this ointment often turns the hair of a light golden colour.

It is impossible to notice all the good remedies for simple ringworm, but I may mention that Goa powder or chrysophanic-acid ointment is efficient, but not better, I believe, than the above, and certainly has so many drawbacks that I have discontinued its use. It stains everything with which it comes into contact, even the face and hair, besides often causing great irritation and swelling of the face, and even eczema impetiginodes. I once applied it to a girl of ten with very nice hair, which it turned such a frightful colour that the parents were only too glad to have it all shaved off.

Where there are only two or three small and *recent* patches, one of the best plans is to apply Coster's paste (two drachms of iodine and six drachms of oil of cade) freely, and then a piece of lint on the place. This will produce a scab, which may be removed in a few days, and then some more paste should be applied. This can be repeated till all the diseased stumps are removed; carbolic oil (1 in 8) being also used to the whole head, to prevent the extension of the disease.

Glacial acetic acid is also a very good remedy for recent patches, especially if applied to any of the small ones detected, while others are being treated. It is sometimes necessary to change the remedy, even with ordinary cases, as a parasiticide that will cure one child may fail with another.

During the treatment of ringworm of the head the body should be examined now and then, especially the neck; and this leads me to remark that *a doctor should always thoroughly examine the head of a child who has body ringworm*, as it is very often only secondary to chronic disease of the scalp.

(To be continued.)

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum allorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

[THROAT DEPARTMENT.]

SYPHILITIC DISEASE OF THE LARYNX AND LUNGS OF LONG STANDING; GREAT EMACIATION; RAPID IMPROVEMENT UNDER IODIDE OF POTASSIUM; REMARKS.

(Under the care of Dr. POORE.)

A. B——, aged twenty-five, a writing clerk, applied at the Throat department of the hospital on May 4th, 1876. His chief symptoms were hoarseness, cough, and complete loss of voice. He stated that his voice, which had been hoarse for some time, had completely failed him since the previous November, and that since then he had been a patient at the Brompton Hospital for Consumption.

The pharyngeal mucous membrane was of normal colour; the tonsils were the seat of old ulcerations; the uvula was half destroyed by old ulcerations; and there were several old scars scattered over the soft palate. With the laryngoscope the epiglottis was seen to be thickened and infiltrated, of a light-red colour, with a large notch out of the left border, much cramped upon itself, and so pendulous that a view of the glottis could not be obtained. The posterior parts of the aryteno-epiglotticean folds, which were just visible, were swollen and infiltrated. The voice was a hoarse whisper, true phonation being absolutely impossible.

The patient was much emaciated; height 5 ft. 9½ in.; weight 7 st. He stated that fifteen months before his weight was 8 st. 10 lb. The thorax was long and narrow, much flattened (equally on the two sides) in the antero-posterior diameter. The flattening under the clavicles was not so marked as elsewhere. There was hyper-resonance under the clavicles, and normal resonance elsewhere. On auscultation, the breath-sounds everywhere were harsh and blowing. There were no adventitious sounds audible; the condition of the vocal fremitus and vocal resonance could not be obtained, owing to the entire absence of voice; cough was frequent and troublesome; expectoration almost *nil*. There was a big scar beneath the right eye, due to an "abscess," which had lasted eighteen months. There was a small ulcer also on the back of the left forearm.

The patient was not conscious of ever having had syphilis, but the physical appearances left no doubt as to their cause. He was at once accordingly placed upon ten grains of iodide of potassium, subsequently increased to fifteen and twenty grains, three times a day. On the 18th of May there was a marked improvement in general health; cough was much less, the sore on arm was nearly healed; weight 7 st. 3 lb. A week later the weight was 7 st. 5 lb. On June 1st the voice was stronger, and the weight had farther increased to 7 st. 11 lb. On the 8th the weight was 8 st., and in another week it was 8 st. 2 lb. The patient stated that since taking the iodide his appetite had much improved, and was at times ravenous. He had been obliged to have his trousers "let out," owing to his increasing size. On the 22nd the weight was 8 st. 4 lb. The patient had in the interval between the visits suffered from an attack of "erysipelas" above the bridge of the nose. The iodide was omitted and quinine substituted. He was still hoarse. On June 24th the iodide was resumed, but as it apparently caused a return of the "erysipelas," it was discontinued on the following week, and perchloride of iron substituted. On July 13th the iodide was resumed, and was continued, with occasional intermissions. On October 5th the weight was 8 st. 8 lb., and the voice was noted as being stronger. The epiglottis had undergone a slow diminution in size from the first, and on November 9th the posterior part of the right vocal cord was distinctly visible, and presented an appearance of only slight thickening. On November 16th the voice had a true tone, and on the 30th the power of phonation had still further improved. On Dec. 14th the weight was 9 st. 1 lb., and the voice had so far improved that on examining the chest vocal fremitus was found to be normal. The flattening of the chest had undergone a perceptible diminution.

The steady gain in weight, which hitherto had been uniformly continuous, now ceased, and the patient attended at the hospital less regularly. On June 20th, 1877, his weight was found to be 8 st. 10 lb. only, and the patient complained of a return of the "erysipelas." Perchloride of iron was accordingly substituted for the iodide, and a few weeks later cod-liver oil was ordered. The epiglottis, though still crumpled and pendant, was considerably swollen, so that the posterior half of the right cord was clearly visible. All attempts to raise the epiglottis by means of a fine bent spatula caused violent spasmodic coughing. On Oct. 4th the weight was 9 st. 5 lb.; all improvement in other respects was well maintained. On Jan. 2nd, 1878, the weight was found to be 9 st. 5 lb., and on Feb. 28th it had risen to 9 st. 8 lb. (a gain of 36 lb. since the commencement of his treatment twenty-two months previously). It was thought advisable that he should still continue to take iodide, but he found it necessary to discontinue it occasionally, because of his attacks of "erysipelas," which was never visible during any of his visits to the hospital. On Sept. 13th, 1878, the weight was 9 st. 6 lb., and a fortnight later it was again 9 st. 8 lb. In Nov., 1878, all medicine was discontinued, and on Jan. 8th, 1879, the weight was 9 st. 5 lb., and all the improvement in the larynx and in the power of voice was found to have been maintained. When last seen the voice had a good strong bass tone, and the patient was practically well.

Remarks by Dr. POORE.—This case presents many points of interest. The absolute hoarseness, the troublesome cough, and the extreme degree of emaciation, gave one so strong an impression of laryngeal phthisis, that had it not been for the laryngoscopic and other signs of tertiary

syphilis, which made the diagnosis a certain one, in spite of the patient's ignorance of ever having had the primary disorder, the prognosis would have been absolutely grave. Notwithstanding the great flattening of the chest, and the general harsh blowing respiration, the apices of the lungs appeared to be little affected, a fact which at once placed the case out of the category of ordinary phthisis. The patient was a sensible man, and had no wish to conceal the fact of syphilis, and in a conversation with him not many months ago, it was elicited that the sore or "abscess" under the right eye had followed a scar which had appeared after spending a night in a disreputable house while in a state of intoxication. It seems therefore not improbable that the primary sore was situated beneath the right eye, and that the want of proper treatment was the cause of its long duration. The rapid and continuous gain in weight, and the marked improvement in his general health while taking the iodide, are points of much interest, and the intercurrent attacks of swelling over the bridge of the nose and round the eyes, presumably caused by the administration of the remedy, and which the patient characterised as "erysipelas," are worthy of attention. At no time were there any marked signs of "iodism."

WEST LONDON HOSPITAL.

NON-DILATABLE STRICTURE OF THE URETHRA; INTERNAL URETHROTOMY; GOOD RESULT.

(Under the care of Mr. TEEVAN.)

CASE 1.—Charles B——, a canvasser, forty-six years of age, was admitted into the hospital on June 19th, 1879, having been put under Mr. Teevan's care by Mr. Edgeworth, of Bristol. From notes taken by Mr. Warrilow, the house-surgeon, it appeared that the patient had a gonorrhœa twenty-six years ago, which was treated by medicines. Eleven years ago he had a second attack, for which he had medicines and injections. During its progress he suffered from retention of urine, which was relieved by the catheter. Ten years ago he contracted gonorrhœa for the third time, which was cured by injections and medicines. For the past two years he had often been troubled with retention of urine, and had noticed that the stream had become much smaller. Sometimes he could pass his water continuously, at other times only "guttatim." The stricture was situated at the bulb, four inches and a half from the meatus externus. The calibre of the healthy penile urethra, as ascertained by Dr. Otis's urethrometer, was 22 F. No. 5 F. only could be introduced into the bladder. The urine was acid, and of the specific gravity of 1017; it contained no sugar, albumen, or renal casts.

By continuous and gradual dilatation the stricture was enlarged to 10 F., beyond which point no dilatation could be effected. As Mr. Edgeworth had been arrested, in his treatment of the case, at the same point, Mr. Teevan determined to divide the stricture. On July 8th the patient was put under the influence of ether by Mr. T. G. Alderton, and the stricture divided, No. 20 F. silver catheter introduced, and withdrawn as soon as the urine had all flowed out. About a tablespoonful of blood was lost at the operation. At 10 P.M. the temperature was 99°. The patient did not sleep in the night, and suffered much pain when he made water, which was slightly tinged with blood.

On July 10th, 10 A.M., temperature 98·6°; he had not had much sleep; he passed a good stream of water, with less smarting. On July 11th No. 20 F. silver catheter was passed and repeated every third day. On July 30th the patient left the hospital quite well in all respects, and able to pass No. 20 olivary elastic catheter for himself. On Aug. 23rd Mr. Edgeworth wrote to say that the patient remained quite well, and could pass No. 20 F. quite easily. "His relief appears to be perfect."

CASE 2.—Benjamin S——, a coachman, forty-six years old, was admitted into the hospital on Oct. 26th, 1879. Ten years ago it appeared that the patient commenced to experience difficulty in making water. He was at that time a coachman and he often had to dismount to micturate. Seven years ago he had an attack of retention, which was relieved by a cold bath immediately following immersion in a hot one. Five years ago he sought advice at a hospital, and his stricture was dilated to No. 5 E. For two months he had attended the hospital as an out-patient, but his stricture could not be dilated beyond 5 E. When admitted he was in fair health. He stated that he had never had gonorrhœa or syphilis, and that so far as he knew he had never met with any injury to the perineum. The stricture commenced 4½ inches from the meatus externus. The calibre of the penile urethra was 30 F. The length of the urethra was 7¾ in. The urine, which contained much mucus, sometimes dribbled away. The stream was small.

For three weeks continuous dilatation was tried. On ten different occasions a small elastic catheter was tied in for periods varying from twelve to twenty-four hours, but the stricture could not be dilated. On Nov. 18th the patient was put under the influence of ether by Mr. T. G. Alderton, and his stricture divided by Mr. Teevan, who passed successively Nos. 20 and 25 metal catheters. No instrument was left in the bladder.

The variations in the patient's temperature were regularly recorded night and morning for one week after the operation by Mr. George Cumming, the house-surgeon. At 9 P.M. on the day of the operation it rose to 102°, and at 9 P.M. the following day it had still further risen to 104°. It fell, however, as rapidly as it rose, for at 12 A.M. on the 20th it was only 99·8°. On and after Nov. 22nd it was normal. The patient left the hospital in all respects quite well, on Dec. 4th, able to introduce No. 21 olivary elastic catheter with ease for himself.

Mr. Teevan observed that no one had as yet been able to elucidate the causation of rigors after urethrotomy. They were usually ascribed to the passage of urine over the wound, but in both the above cases no catheter had been retained; the urine was allowed to flow over the wound, and no rigors took place.

RADCLIFFE INFIRMARY, OXFORD.

TETANUS AFTER A SEVERE SCALP WOUND; RECOVERY.

(Under the care of Mr. H. P. SYMONDS.)

THE following case, for the notes of which we are indebted to Mr. J. T. Mitchell, M.B., house-surgeon, is interesting from the fact that the patient recovered, though but little was done so far as the administration of drugs is concerned. Indeed, it would seem that the most favourable progress was made when no special drugs were being exhibited, and that these tended rather to retard than accelerate recovery.

G. P——, aged fifteen, was seen on Sept. 1st by Dr. Gosset, of Steventon-hill. A scalp wound, inflicted three days before by a fall upon some loose stones, had nearly healed at the upper part. The whole had been covered over with many layers of strapping, the removal of which was followed by an escape of a large quantity of thin pus from the lower end of the wound, which was the deeper, and was puffy and gaped somewhat. Fresh strapping was applied, and the edges of the wound were drawn together.

On the 13th the boy was again seen by Dr. Gosset, as friends noticed that the jaw had been getting stiff for three days previously. The mouth could be opened a quarter of an inch only. There were no spasms or stiffness elsewhere, and the wound had apparently quite healed, there being an adherent scab at the lower part.

On the 16th hydrate of chloral and tincture of conium were given.

Next day, while sitting in a chair in front of Dr. Gosset, he was seized with a spasm in the back, and fell backwards, stiff and straight, rolling over on to the face. When lifted up he was as straight as a board, and some spasm could be felt in the back while he was being held. After about two minutes he was able to sit down again, and it was seen that he had torn open the whole wound except about an inch and a half at the posterior end, and the left flap was everted a little. The edges were drawn together by a couple of stitches, the insertion of which did not produce any spasm or sign of pain. The mouth could be opened about two-thirds of an inch. The back and back part of the neck had previously been stiff, but no sudden spasm had been before experienced. Subsequently to the accident he had lain a great deal on a brick floor, only a sack or coat being under him.

On the 18th he was admitted into the infirmary, and the following report was made:—"Patient cannot open his mouth wide enough to admit the finger, the left side of the jaw being the more rigid. The belly-wall is hard; the

angles of the mouth drawn up. The back is arched (opisthotonos), and pain is complained of here. The muscles of the legs and arms, as well as those of the neck and back, are stiff. The breath is fetid; bowels have been opened; there is no headache. Pulse 120. Muscular pain of a catching nature, but no spasmodic jerking. The muscles of the back were very rigid, and the glutei firmly contracted. Although the muscles of the thighs are hard, the patient can draw up his legs. When he turns on to his face his body is like a rigid rod."

On the following day the mouth could not be opened as widely as before; the opisthotonos was very marked, and the belly-wall hard and knotty. The "risus sardonicus" was feebly marked. There was no difficulty in swallowing liquid food. On the 22nd he had passed a comfortable night. The head was more drawn back, but there were no spasms, except a slight stiffening when he was shaken. Constipation had been continuous since admission, and was relieved by enemata. On the 24th the night nurse reported that during the night the boy had had a seizure "like an epileptic fit," in which he bit his tongue. On the nights of Sept. 26th and 27th he did not sleep much, complaining of pain his back.

On Oct. 1st the tenseness and fixation of the jaw still continued, but he slept well, and the pain complained of had left him. He was taking his food well. On the 3rd the abdomen seemed rather harder, and the symptoms altogether retrograde, so bromide of potassium was ordered in doses of half a drachm every six hours. Up to the 9th he bore the bromide well, and said he felt better; but on the 10th, although the facial muscles were less affected, so that he could smile easily, the heart's action was seriously depressed, being slow (44) and irregular, and the pulse very compressible. This drug was therefore discontinued, and carbonate of ammonia and bark were substituted. Under these the pulse gradually improved. By the 16th there was a marked improvement in all his symptoms, although the pulse was still compressible, and from this date there was a rapid recovery. By the end of October the patient could easily walk about, and did not complain of any stiffness, nor could any be detected by manipulation. He still retained the risus sardonicus, which was at times marked, the features being especially distorted when he attempted to smile.

Remarks.—It will be seen that chloral was given for two days only, the symptoms becoming worse during its exhibition. The bromide was given at the rate of two drachms a day for seven days, and during this time the symptoms did not abate nearly so quickly as they did subsequently; but the heart's action was greatly interfered with, and the patient much prostrated. Then, on the substitution of a slight stimulant for the latter drug, the improvement was very rapid.

CHILDREN'S HOSPITAL, NOTTINGHAM.

TWO CASES OF AMPUTATION OF HIP-JOINT BY FURNEAUX JORDAN'S METHOD.

(Under the care of Dr. LEWIS W. MARSHALL.)

CASE 1.—S. P——, aged seven years, was admitted on April 1st, 1878, with morbus coxæ (left) of some few months' standing; a pallid, fair, delicate boy, having, however, no evidence of any visceral disease, but much wasted by long-continued pain and suffering. An abscess was commencing on outer side of thigh, which had to be aspirated on the 21st June. This did not lead to a satisfactory escape of the collection, consequently a counter opening was made at a more dependent point, and hair-drainage substituted for tubing. During September he developed two bed-sores, and was frequently subjected to copious diarrhœa, checked by compound kino powder.

On Oct. 9th, the boy's condition having become much worse in every way, the head of the femur was excised. The head of the bone was found to be partially removed, but the pelvis was the chief seat of disease. A complete perforation of considerable size passed directly through the bottom of acetabulum into the pelvic cavity. Numerous pieces of bone were taken away from the edges and neighbourhood of this opening. All the sinuses were treated with chloride of zinc solution (forty grains to an ounce), hair-drainage and simple dressing of carbolic oil, and a Campbell de Morgan splint were adopted. Although for a time some improvement was noted, still constantly recurring attacks of diarrhœa &c. so reduced him that a speedily fatal termination might fairly have been expected. Under these conditions, and as a last resource, amputation at the hip-joint was determined upon by the method introduced to the notice of the profession by Mr. Furneaux Jordan (see THE LANCET, March 22, 1879).

On April 20th, 1879, the limb was removed at the hip-joint, the vessel being controlled in the groin by Esmarch's india-rubber tourniquet at first; but, as this was ineffectual, by the fingers only. The boy stood the operation very well indeed, considering his unpromising state when placed upon the table, and the amount of blood lost was, as compared with the older method of operation, but little in quantity. The femoral artery was the only vessel secured by catgut; all the smaller vessels, which it was deemed necessary to attend to, were twisted. A loose dressing of carbolic oil and lint was applied, hair being used as a drain.

On the 25th the diarrhœa was much improved, the temperature was falling, the appetite improved, and the boy slept well. The hair-drain was reduced to half the original size. On and after May 1st the wound was dressed daily. There was a very marked improvement in the general state, and the diarrhœa, for which up to this date a starch and opium enema had been used occasionally, was very much better. On the 8th the wounds were healing rapidly, that across the end of stump being but a superficial one. On the 18th the diarrhœa was not so well. Acetate of lead and opium were ordered. The condition of the stump was satisfactory. On July 1st he had been better for the last few days, both as to general condition and diarrhœa. Wound healing. On the 10th there was diarrhœa, with pain in the head and discharge from the left ear.

From this date he gradually went back, becoming comatose, and died on July 24th, 1879.

CASE 2.—Charlotte S——, aged seven years, had suffered from disease of left hip for several years. At the time of admission (Nov. 12th, 1878), she had luxation, with sinuses discharging in the buttock. There was no evidence of any visceral lesion at the time.

On Dec. 11th the hip-joint was excised, when the disease was found to be confined to the head of the bone, the acetabulum being uninvolved beyond slight erosion of cartilage. The great trochanter was affected, and a portion was removed. The sinuses were all treated with chloride of zinc solution, and hair-drains were introduced. The same dressings and splint were used as in Case 1.

From the date of operation up to June 13th, 1879, although for the first month or more her improvement was steady and satisfactory, portions of bone frequently came away and pus re-collected in the thigh. On this date (June 13th), a large abscess was laid open in the middle of the thigh, and much fetid pus was evacuated. On August 1st another collection was opened in the groin, and on the 9th albumen was found in the urine to the amount of one-eighth.

On June 13th the limb was removed at the hip-joint, the main vessel being controlled in the groin by the hand only. Though very much less blood was lost than in the previous case, the shock resulting from the operation was considerable. Besides the femoral, not more than two vessels required tying. Dressings, &c., were exactly similar to those used in Case 1. On the 15th the dressing, which had been kept soaked in carbolic oil, fell off during the night. The patient complained of no pain or inconvenience of any kind. She had slept well during the previous night, and took food well. On the 16th one suture was removed to relieve tension. Ordered fish or fowl. Considerable reduction in temperature. On the 17th the discharge was very fetid. To be dressed twice daily. On the 21st, perchloride of iron was ordered. On the 25th the odour was not unpleasant. The condition of the stump and of the patient was much improved, and the drain was reduced to half its original size. On the 30th the granulations were somewhat pale and flabby. The flaps were drawn together by strapping. On Sept. 4th the albumen was found to be diminishing. On the 6th, tartrate of iron and iodide of potassium were ordered (in place of the perchloride), and cod-liver oil in pancreatine wine. Since pressure had been used, the healing process had improved. Nothing of consequence occurred in this case after this date. The patient made a steady recovery, being discharged on Oct. 8th, with but a trace of albumen in the urine and the stump nearly healed.

Remarks by Dr. MARSHALL.—These cases I deem worthy

of notice because of the unfavourable condition of each at the time of the operation. The method of operating being a somewhat recent addition to surgery, and from the success attending this procedure; their record cannot fail to be of interest to the profession. Both were practically doomed at the time of operating, and I regret now that No. 1 had not the advantage of an earlier operation, but this was due to the fact that Mr. Jordan's paper had only just then been published, and I shrank from the old method which entailed so much bleeding and shock. No difficulty was encountered in controlling the hæmorrhage, which was done in each case by Mr. Wright, senior surgeon to the General Hospital, by pressure with the thumbs in the groin. It was explained in the notes that owing to Esmarch's band having been first used in No. 1 more blood was lost than in the second case. I cannot conceive, however, that any advantage could have been gained by the use of Mr. Davy's lever or any other instrument for the same purpose, as certainly in the last case two ounces would amply cover the loss of blood.

Although only one of the two ultimately recovered, so far as the operation was concerned, it proved successful in both, as the boy succumbed to visceral lesions, the stump three weeks before death being all but healed. In the second case the shock was considerable in spite of the small quantity of blood lost, still the girl did well ultimately.

This method of operating is certainly a very decided advance in this branch of surgery, as by its adoption lives can be saved which would otherwise be lost to us.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

A large Gall-stone passed per anum, with remarks on the structure and formation of Gall-stones.—Rare Urinary Calculus.—Cyst of Kidney removed by Abdominal Section.—Intra-uterine Cystic Disease of Kidney.—Syphilitic Disease of Fœtal Bones.—Elephantiasis of the Penis.

THE Annual Meeting of the Society was held on the 6th instant, Mr. Hutchinson, President, in the chair. The first hour was devoted to the ordinary business of the Society, the latter part of the time being employed in the more formal work of the election of officers for the ensuing year, and in thanking those who were retiring from their official duties.

Dr. ORD showed a large Gall-stone, which had been passed per anum by a lady under the care of Dr. Carr Roberts. She had been recently confined of a living child, and the only symptoms at all referable to the calculus were excessive pain in the back, and constant diarrhœa of a pale-yellow colour; there was no jaundice. The stone, which was removed by the finger, measured 1⅞ in. in its long diameter, and 1½ in. across. It was composed of cholesterine and bile pigments, and was therefore clearly not an enterolith, which consists of hair, concreted indigestible matter, and triple phosphates, lime salts, cleagic or lithofellinic acid, but never of cholesterine. Referring to the structure and composition of gall-stones, Dr. Ord pointed out that they consist chiefly of a mixture of cholesterine with biliary pigment, mucus, lime salts of biliary acids and carbonate of lime being occasionally present. On section, they are seen to consist of four parts: a dark central portion, consisting mainly of pigment, with a small quantity of cholesterine in rhomboidal forms; around this a lighter portion with a distinctly radiated structure, composed of columnar masses of colourless cholesterine, with biliary pigment packed between; surrounding this is a zone, with the laminæ arranged concentrically, and composed of undulating crystalline fibres of cholesterine stained with pigment, more deeply stained towards the surface; the outer surface of the calculus, which is also the most recently formed, is deeply coloured, without any definite structure, and is composed of an intimate mixture of cholesterine in shapeless masses, spheres, or fibres, with biliary pigment. These facts point to a gradual metamorphosis of the calculus, and Dr. Ord suggested that it was the presence of the colloidal pigment which prevented the freshly deposited cholesterine from assuming at once its proper crystalline form; but that, as the pigment tends to become itself crystalline, the two bodies gradually separate, and the cholesterine crystallises. In support of this hypothesis, it was alleged that in the most deeply pigmented calculi the outer layer is abundant, while in the paler ones the crystalline centre predominates. Dr. Ord related some experiments in which he found that cholesterine deposited in albumen or gelatine is at first spherical, and gradually assumes a quasi-crystalline form; and that mixtures of cholesterine and bile pigments, dissolved in hot acetic acid, form, on cooling, homogeneous spheres, which gradually break up into smaller spheres, and then again into needles, which arrange themselves in a mixed laminar and crystalline structure around the centre of each sphere.

Dr. ORD also showed a remarkable Calculus which he had removed from the pelvis of the right kidney of a patient who had died in St. Thomas's Hospital of malignant disease of the bowel. The mucous membrane was very closely adherent to the stone and had to be detached with the knife, but showed no signs of inflammation. The calculus when recent was moist and soft on the surface; when dry and cut across it was seen to consist of a wrinkled black shell loosely surrounding a hard grey kernel. The shell consisted of a chitinous substance—altered mucus and epithelium, deeply stained with a pigment not that of ordinary urine or of blood. The nucleus consisted of uric acid and pigment arranged in concentric laminæ, many of which on the surface were imperfect, portions of them having been eroded. Between the shell and the kernel was some powder composed of large uric-acid crystals mixed with colloid and subcrystalloid pigment. Dr. Ord suggested that the original uric-acid calculus had not set up any irritation in the kidney, the pelvis of which invested it very closely, and then the mucus secreted had concreted on the calculus and eroded it in harmony with Dr. Rainey's law of molecular disintegration. The uric acid being converted into large colourless crystals, the pigment separated into masses.

Mr. HULKE thought there was not complete parallelism between the erosion of glass by the crystallisation of carbonate of lime, and the erosion of the crystalline calculus by the colloid shell.—Dr. ORD replied that he regarded the action of carbonate of lime on glass as an exaggeration of the action of a colloid, and that in this particular case the colloid was mixed with a very active pigment matter. Very perfect spheres of carbonate of lime and triple phosphate can be readily obtained in gum, showing concentric lines, and after a time a radial structure; these are permanent in the same solution or in Canada balsam, but if transferred to a more concentrated solution of gum they rapidly undergo erosion and gradually disintegrate; some of the change in the nucleus of the calculus might be due to the effect of "fresh solution."

Dr. ORD showed a large Calculus of Cystine recently removed by Mr. Reginald Harrison from a man aged twenty-one; its weight was 1050 grs. The urine did not appear to contain cystine before or after the operation of lithotomy.

Dr. ORD also showed an oriental Bezoar composed of cleagic acid, polished brown on the surface, of a stratiform arrangement, with a silky lustre on section. The cleagic acid is the result of the metamorphosis of the food of ruminants in whom this form of bezoar is met with.

Dr. DAY showed a large Cyst of the Left Kidney, removed four days previously by Abdominal Section by Mr. Knowsley Thornton. A little girl, aged seven, was admitted into the Samaritan Hospital in October last with a large abdominal tumour, which was variously diagnosed as a large multilocular cyst, hydatid, and renal cyst. It had been noticed five years. The child was in all respects healthy, but passed only a small quantity of non-albuminous urine. On Nov. 4th Mr. Thornton drew off with the aspirator five to six pints of fluid having all the characters of urine, but containing albumen. In five to six weeks the sac began to refill, and on Jan. 3rd Mr. Thornton removed the tumour by abdominal section. The patient was doing well, and promised a good recovery. Mr. Thornton had noticed that the sac was so thin that it threatened to rupture into the peritoneum; the peculiar way in which the tumour had displaced the colon had rendered its removal, and the separate ligature of the renal vessels, easy, while the recovery was expedited by the way in which the colon fell back into the gap left by the operation.

Dr. EWART showed a specimen of Cystic Degeneration of the Left Kidney and Ureter in Intrauterine Life. The obstruction appeared to be caused by the lax state of the mucous lining of the ureter where it lay in the wall of the bladder, which was so great that it completely obstructed the passage of fluid or a probe from above, though it offered no obstacle to a probe introduced from below. This valvular obstruction might be the origin of many cases of cystic disease of the kidney.

The PRESIDENT exhibited a specimen of Elephantiasis of the Penis of enormous size which he had recently removed from a native of the West Indies in whom it had existed for many years. His son had detected filaria in the blood.

Mr. EVE showed the bones of a Fœtus supposed to be suffering from congenital syphilis. The mother, aged thirty-one, was a patient in St. Bartholomew's Hospital, suffering from an annular stricture of the rectum, dating three years back, when the patient had passed blood and slime with the motions. She miscarried in the hospital before treatment was begun, the abortion not being due to the condition of the rectum; she was then between five or six months advanced in pregnancy. Only the long bones of the fœtus were affected, and all of these except the left tibia and fibula showed gelatiniform degeneration of the epiphyses, which in many instances were separated from the diaphyses; the ends of these diaphyses were bare, soft, and ragged, uncovered by periosteum for about one-eighth of an inch, and covered with detritus. The left tibia and fibula were brittle and showed separation of epiphyses, irregular thickening of the bone, from which the periosteum was readily separated; the lower end of the tibia had a wormeaten appearance. Several microscopical specimens taken from the bones, and drawings of them, were exhibited. The epiphysial and intermediary cartilage were normal; the calcified cartilage was thickened and contained unusually large marrow spaces choked with granular matter; the lamellæ of the spongy bone were thin and scanty, and showed many of Howship's lacunæ filled with osteoclasts, as if undergoing rapid absorption; the periosteum was thickened, and beneath it was a thick layer of spongoid tissue of Parrot; transverse sections of the thickened bone showed the true shaft surrounded by lamellæ of new bone united into a kind of network. Just as gummata are local hyperplasiæ of connective tissue, this affection would seem to consist in a local hyperplasia of the elements out of which bone is formed. But at the ends of the diaphyses, which are less vascular, and where endocartilaginous ossification is occurring, the tendency is to degeneration; while under the periosteum, where the vascularity was greater and the ossification intra-membranous, there is an excessive formation of the fibrillar matrix of bone; this is the spongoid tissue of M. Parrot. It may remain unossified, or, being ossified, form the subperiosteal thickenings seen in two of the bones shown. The morbid process, as would be expected, attacks the growing parts of the bone. M. Parrot has stated that suppuration only occurs from some irritation after separation of the epiphysis; but the facts that in one case a sequestrum as large as a pea was found surrounded by pus, while in several cases small cavities containing pus and specks of bone were seen, and the existence of caries at the ends of the diaphyses of some of the bones exhibited, in which no separation of the epiphyses had occurred, point to an opposite conclusion. Mr. Eve showed also two "natiform skulls" from the St. Bartholomew's Hospital Museum.—Dr. GRAILY HEWITT asked if any examination of the placenta had been made in Mr. Eve's case.—Dr. HOGGAN thought that the specimens under the microscope illustrated exceedingly well the normal process of ossification in fœtal cartilage.—Mr. CRIPPS thought the evidence of syphilis in the mother deficient; only about 10 per cent. of cases of annular stricture of the rectum were syphilitic.—Mr. EVE stated that he had not seen the placenta; he thought there were distinct departures from the normal processes of ossification in his specimens. He had been unable to get a complete history of the mother, but he thought that the presence of a cicatricial stricture of the rectum, the fact of abortion, and the condition of the fœtal bones, were almost conclusive evidence of syphilis.—The PRESIDENT considered cicatricial stricture of the rectum, together with the changes in the bones, strong evidence in favour of the existence of syphilis. He suggested that it would be well to have the specimens examined by a committee, and nominated for that purpose Dr. Barlow and Mr. Butlin.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

THE second meeting of the session 1879–1880 was held at the Royal Kent Dispensary, Greenwich, on Nov. 7th, 1879, Mr. J. P. Purvis (President) in the chair. Dr. Curnow read a paper on "Rest in the Treatment of Medical Cases," in which he said that rest in the treatment of surgical cases had been fully treated of by Mr. J. Hilton, but that rest in the treatment of medical cases had not received the attention it deserved. Dr. Curnow then said that if we turn to our text-books we find that specific diseases, parasites, and gout, are almost the only diseases treated by specific remedies; and that in all other diseases treatment depends upon two principles—(*a*) giving support to the patient; (*b*) giving physiological rest to the organ or organs involved. The first point to be aimed at is to remove the cause of the disease, as no treatment will be of any avail until this is attended to. Dr. Curnow then cited several typical examples of diseases of the brain, lungs, liver, stomach, and kidneys, in proof of the benefit of this mode of treatment.

Reviews and Notices of Books.

Ocular Therapeutics. By L. DE WECKER. Translated and edited by LYTTON FORBES, M.A., M.D. pp. 552. London: Smith, Elder, and Co. 1879.

DR. DE WECKER has written a very interesting volume, and Dr. Lytton Forbes has done good service in rendering it into excellent English. At whatever page it is opened the reader will find something to interest him, something novel, or some new application of old knowledge. In their chatty and agreeable style these lectures remind us strongly of those of Trousseau.

In speaking of the affections of the cornea a good account is given of the rodent ulcer, sometimes also called Saemisch's ulcer, an affection that usually attacks old people, and, commencing in a slight detachment of the epithelium near the margin of the cornea, gradually extends round and over that membrane till it is entirely destroyed. In the treatment of this affection, once so formidable, Dr. Wecker observes ocular therapeutics may boast of one of its most brilliant triumphs. The method of treatment alluded to was suggested by M. Saemisch, and consists in slitting up the ulcer boldly from behind forwards; and it must be admitted that if this operation be performed while the ulcer is small it is generally successful, but, as Saemisch, indeed, himself admits, if the wound has to be made as large as the radius of the cornea, the result is very uncertain. Dr. Wecker strongly recommends the use of eserine as a local application after the division. In regard to its etiology he observes that it is often the result of accident and exposure amongst the poorer classes, but amongst the wealthier it is the outcome of an inflamed lachrymal sac, the secretion of which has been retained and has decomposed.

Dr. Wecker appears to regard sclerotitis and episcleritis as essentially the same disease. He describes sclerotitis as consisting of a series of circumscribed swellings or centres forming bulgings round the cornea, the deep-coloured injection of which is an important diagnostic sign, enabling us to distinguish sclerotitis from other circumscribed inflammations of the conjunctiva, as phlyctenular or pustular conjunctivitis. This account may fairly be demurred to. Pure sclerotitis is not very common, still every ophthalmic surgeon in this country is familiar with a condition of inflammation of the whole sclerotic in which it presents a deep rose-coloured blush, not affecting, as in episcleritis, to which Dr. Wecker's description is applicable, circumscribed spots, but the entire membrane, and unaccompanied either by keratitis or by iritis. It is to this affection that the term "rheumatic ophthalmia" is properly applicable. It is attended with con-

siderable pain affecting the brow and temple; there is little, if any, intolerance of light, and but slight lachrymation. Dr. Wecker finds much advantage accrue in episcleritis from the subcutaneous injection of pilocarpin (five drops daily of a 10 per cent. solution). This should be done in the morning, in bed, so as to secure copious perspiration with salivation. We somewhat doubt whether the patient might not prefer the episcleritis to the effects of the treatment, especially as the disease does not appear to yield to less than eight or ten of these injections. In addition he orders potassium iodide, sometimes with iron. He does not, however, allude to the plan of treatment in which colchicum is combined with quinine and with aconite, and which in many instances acts with great rapidity and certainty.

Dr. Wecker speaks highly of the duboisia as a mydriatic, and therefore applicable in the treatment of iritis. He states that solutions of duboisia of equal percentage with atropine are by far the more powerful. Maximum dilatation and paralysis of accommodation are attained very quickly. We would just note, in passing, that it is a powerful agent, and should be administered with caution, especially in children. The use of mercury is recommended particularly in plastic iritis, and he employs the bichloride; in the practice of some surgeons, however, calomel has appeared to act more energetically. He believes that a remission of all symptoms may be brought about with almost absolute certainty by paracentesis, the injection of morphia at night, and by a few grammes of chloral.

The treatment of posterior synechiæ is fairly and sensibly discussed. Dr. Wecker thinks that in many instances they may be broken down by the alternate use of eserine and atropine; but if this is found to be impossible, and the adhesions are clearly giving rise to pain and recurrent iritis, operative procedures must be resorted to, and of them he prefers that of M. Passavant, which consists in making a peripheral opening, and drawing out the fold of iris corresponding to the synechia; when the synechia has been [once freed, the fold is to be released. By this means, he thinks, the capsule of the lens is less endangered than by the proceeding of Streatfeild and Weber, whose operations, he considers, have played a much larger part in books than in actual practice.

In treating of the difficult subject of choroiditis Dr. Wecker makes several important observations. He considers that in the greater number of cases it commences with iritis, and that in four cases out of five syphilis is the important factor; hence he recommends mercury in small doses, and iodide of potassium, which he states have answered well in his hands. As the attack often spreads to the retina, he advises rest in a darkened room, though he fully recognises the evil effect of too long immurement in darkness. He gives a word of caution in regard to operations necessitating the opening of the capsule of the lens, where dacryocystitis exists, as he considers them to be very likely to give rise to panophthalmitis. In choroiditis from wounds of the cornea or lens, he directs a gentle stream of a weak solution of hydrochlorate of quinine to be passed between the eyelids every hour or two.

The following story, recently told by so eminent an ophthalmic surgeon as Dr. Wecker, is a warning that should be laid to heart by every practitioner:—

"Some twelve years ago a patient entered my consulting-room, and stated that while crossing the boulevard, a very large fly had entered his right eye, inflicting a regular blow on the eyeball. I found the eye considerably irritated, and watering, and everting the upper lid made a careful examination several times, neglecting, however, to sweep with my probe the upper cul-de-sac. I found nothing, and attributed the irritation of the eye to the blow given by the insect, which had evidently been severe. Finally, I dismissed the patient. Next day he returned, and on once more everting the lid, I perceived near the inner extremity of the tarsus an enormous fly. I straightway removed it from its prison in the superior cul-de-sac, where it had escaped discovery the day before, simply because the patient under the influence of pain had closed his lids very tightly. I was obliged to listen to his reflection, and a very just one too, that removal twenty-four hours sooner would have been very much more to his liking."

St. George's Hospital Reports. Edited by W. H. DICKINSON, M.D., and T. P. PICK, F.R.C.S. Vol. IX., 1877–78. London: J. & A. Churchill. 1879.

THIS is a bulky volume of some 820 pages, three-fourths of which are devoted strictly to Reports, thereby marking a new departure in works of this class, one which fulfils the primary object of such publications, and one, too, which, on the scale here presented, will compare with those leading examples of hospital statistics issued annually from the great Berlin and Vienna institutions. For in the volume before us the papers or memoirs by members of the hospital staff take a subsidiary place. They are neither elaborate nor exhaustive, and are obviously intended to be merely supplementary. If, then, in what follows, we dwell especially upon the Reports, it will be simply because they do occupy the chief place. Looking at them generally we see to its full extent the value of careful and complete records of registration, and St. George's Hospital must be congratulated as much for the thoroughness of its system in this respect, as for the painstaking manner in which the records have been analysed. We have here not only the reports of the medical and surgical registrars for the years 1877 and 1878, drawn up respectively by Dr. Isambard Owen and Mr. W. H. Bennett, but there is also a pathological report by Dr. Ewart, and reports of the obstetrical, ophthalmic, throat, orthopædic, aural, and dental departments, compiled by the officers in charge of each of these special branches. They testify to the utility of such special departments in general hospitals; and a reflection naturally arises in regard both to these specialties and to the other branches of the Reports—namely, how great would be the gain were all our metropolitan hospitals to do likewise. For it must be pointed out that the information here given is not merely statistical. Many classes of disease are fully analysed, so that the work of the hospital is fairly set before the reader.

The memoirs which close the volume are, as we have said, neither exhaustive nor elaborate. But most of them are interesting and of practical utility. Some consist merely in records of cases—as that on a case of Diabetes by Drs. Cavafy and Bartalocci, where the results obtained by treatment by ergot, Calabar bean, thymol, salicylate of soda, salicylic acid, quinine, and lastly, codeia, are respectively analysed, the case terminating fatally from acetonæmia, whilst apparently progressing favourably under codeia. Dr. Cheadle gives an account of cases of Exophthalmic Goitre, one especially valuable for its record of the morbid appearances found after death. Dr. Barclay contributes a paper on Salicylic Acid in Gout, but his cases are too few from which to draw just conclusions as to the remedy. Mr. Holmes, in a paper on the Treatment of Compound Fractures, sums up his experience in favour of the antiseptic method in most, but not in all cases, especially in the first period, but he holds that if continued after three weeks healing is retarded from the irritation caused by the antiseptics. The concluding paragraph of his paper contains the following:—"There has been too much of the character of a 'speciality' given to the antiseptic treatment. There is nothing really mysterious or difficult about that treatment, though if it could only be carried out by adepts it would *ipso facto* be unfitted for general use." Dr. Ogle contributes a careful paper on Diphtheria in Rural Districts, from which we gather that he has

met with cases of non-membranous sore-throat of diphtheritic nature.

In conclusion, the editors may be congratulated in determining to make the reports a chief feature of the volume. By doing so they entail the maintenance of a high standard of registration of the cases treated in the hospital; but at the same time it ought by no means to happen that any system of this sort should deter members of the staff from presenting to the profession in other ways the results of their personal observation of the many instructive cases falling under their charge.

ENGLISH MORTALITY IN 1879.

THE proportional relation between the rate of mortality in the twenty largest English towns and that in the whole country is tolerably constant. The annual death-rate in these twenty towns during the last quarter of the year 1879 averaged 24·6 per 1000 of the population, against 22·4, 22·8, and 25·1 in the corresponding periods of the three preceding years. Assuming the usual proportion between the mortality in these towns and in the whole country to have been maintained, it may be estimated that the general death-rate in England and Wales last quarter was equal to 22·4 per 1000. This rate is slightly lower than that which prevailed in the last three months of 1878, but, as might be expected to result from the severe and long-continued frost, exceeds the average rate for the season. The mortality during the first three quarters of 1879 having been reported on by the Registrar General, this estimate of the mortality in the last three months enables us approximately to calculate the death-rate for the whole year at 21·3 per 1000, or 0·5 below the average rate in the preceding ten years. Notwithstanding an excess of mortality in the first and last quarters of the year, due to climatic causes, the rate for the whole year was below the average, mainly owing to the exceptionally low death-rate in the summer quarter. The decline in the English death-rate noticeable since sanitary reform and progress was stimulated by the Public Health Acts of 1872 and 1875, was fully maintained last year. The average death-rate in England and Wales during the nine past years of the current decade has not exceeded 21·6 per 1000, against 22·4, 22·2, and 22·5 respectively in the three decades of the thirty years 1841-70. The average decline of English mortality during the past nine years has been equal to 0·8 per 1000 of the population annually. At first sight this fractional decline of mortality seems but a slight result to claim as evidence of sanitary progress. It signifies, however, that in the nine years more than 150,000 persons have survived in England and Wales, whose deaths would have been registered if the average death-rate of the preceding thirty years had been maintained. This fact should afford no slight encouragement to those who are fighting the hard fight for public health and improved sanitary condition.

HEALTH OF LARGE ENGLISH TOWNS.

FIFTY-THIRD WEEK OF 1879.

THE week ending last Saturday constituted the fifty-third of 1879, according to the ruling of the Registrar-General, because four of its seven days belonged to last year. In twenty of the largest English towns, containing nearly a third of the entire population of England and Wales, 5889 births and 4120 deaths were registered during last week. The births exceeded by 805, and the deaths by 750, the average weekly numbers during 1878. This marked excess of births and deaths was in great measure due to the delay of registration in the previous week caused by the Christmas holidays. The deaths exceeded those in the previous week by 243; they were equal to an annual rate of 29.1 per 1000 in the twenty towns, against 30·5 and 27·4 in the two preceding weeks. During the thirteen weeks ending on 27th ult., the death-rate in these towns averaged 24·2 per 1000, against 22·8 and 25·0 in the corresponding periods of 1877 and 1878. The lowest death-rates in the twenty towns last week were 19·6 per 1000 in Sunderland, 21·0 in Portsmouth, 22·0 in Oldham, and 22·7 in Norwich. The rates in the other towns ranged upwards to 30·6 in Liverpool and Brighton, 31·5 in London, 32·0 in Salford, and 35·1 in Plymouth.

The deaths referred to the seven principal zymotic diseases in the twenty towns, which had been 627 and 574 in the two preceding weeks, rose again to 607 last week; they included 241 from whooping-cough, 128 from scarlet fever, and 125 from measles. Whooping-cough fatality showed a further general increase last week, and was proportionally largest in Salford, London, and Newcastle-upon-Tyne. The death-rate from scarlet fever was greatest last week in Newcastle-upon-Tyne, Leicester, and Bristol; and that from measles in Plymouth, Hull, Liverpool, and Bristol. The 27 deaths from diphtheria in the twenty towns included 16 in London, 3 in Birmingham, 3 in Liverpool, and 3 in Manchester. Small-pox caused 4 more deaths in London, but not one in any of the nineteen large provincial towns. The Metropolitan Asylum Hospitals contained 56 small-pox patients on Saturday last, against 48 at the end of each of the two preceding weeks; no less than twenty-two new cases were admitted to these hospitals during last week, a higher number than in any week since August last.

Notwithstanding the increase of registered mortality in London last week, the deaths referred to diseases of the respiratory organs were but slightly more numerous; they were 672 last week, against 799 and 652 in the two preceding weeks, and included 426 from bronchitis and 154 from pneumonia. The deaths from these diseases exceeded, however, the corrected average weekly number by 152. The annual death-rate in London last week from diseases of the respiratory organs and phthisis was equal to 12·2 per 1000; the rate from the same causes in Liverpool did not exceed 10·5.

THE SUCTION TUBE IN CATARACT.

To the Editor of THE LANCET.

SIR,—In the last week's number of THE LANCET, Mr. Pridgin Teale, in a letter on the suction of cataract, refers to my opinion and experience, as published in 1875. Will you allow me to say that since the date in question I have continued to employ suction, both in hospital and in private practice, and that I am entirely satisfied with the results obtained. The statistics of the Ophthalmic department of St. George's Hospital were not accurately kept prior to the appointment of an ophthalmic registrar in December, 1877; so that I can only appeal to records for two years. In those years, 1878-79, twenty-seven opaque lenses were removed, either entirely or partially, by suction. Four patients with laminar cataract had both eyes treated at once. Three cases were complicated with advanced interstitial keratitis. In one case opacity of the lens followed acute cyclitis with dropsy of the vitreous. Five were traumatic cases, and in three instances suction was applied for the removal of cortical débris left behind in extraction.

With one exception, the whole of these cases did perfectly well; and the exception had nothing to do with the use of suction. The patient was a man fifty-five years old, who had been wounded near the ciliary region by a pointed stick. His traumatic cataract was removed, a week after the injury, mainly by a downward iridectomy and a scoop, but some small portions were taken out by suction. The eye remained irritable, and the appearance of threatening symptoms in the other led me to perform enucleation.

Permit me to add that, in the main, I cordially agree with what Mr. Pridgin Teale has written; but that I employ, and in my own hands do not share his objection to, a curette with notches at the margin of its opening.

Your obedient servant,

Wimpole-street, Jan. 6th, 1880. R. BRUDENELL CARTER.

BELFAST HOSPITAL SUNDAY.—Collections for this purpose were held in most of the Belfast churches on the last Sunday in 1879, but the result will not be known for some time. The total amount obtained will go to the funds of the Belfast Royal Hospital.

THE LANCET.

LONDON: SATURDAY, JANUARY 10, 1880.

IF it be a fact, as some allege, that the Government is beginning to set its house in order with a view to the trials and contingencies of a general election, the claims of the medical profession to a pacific, if not genial, policy may be recognised. At the moment of writing we do not remember how many names the British Medical Register includes, and it is not now necessary to inquire. The total must be a large one, and perhaps half is composed of men whose good feeling it would be worth while to secure. There is this peculiarity about the constituency of medical practitioners: they not only form a considerable body in the numerical aggregate, but the individual members of our profession are well scattered over the country, and an acute political agent would scarcely fail to perceive that they possess, and may at any crisis exercise, a certain amount of influence. We are aware that the Government of the day does not entertain the most cordial feelings towards medical men, and it probably sets small value on their support, and would not be greatly moved by their antagonism; but we question whether these sentiments are as practical as they might be rendered by a little more inquiry. It sometimes happens that danger and difficulty threaten a cause from quarters whence neither good nor evil is anticipated. We do not assert that this is likely to be illustrated with the influence exerted by medical practitioners during the approaching struggle. It will suffice to point out a *possible* contingency, and to urge that, laying aside the evident feeling of dislike with which the Government regards the profession, it might be politic to reflect whether it is too late to make at least one attempt to smooth away some of the asperity which has been produced by the manner in which the general body of practitioners have been treated during the last five or six years, and the scant respect which has been paid to repeated and urgent remonstrances. We can have no scruple in adopting the *argumentum ad hominem*, because it is not for ourselves as a class or for class interests we plead, but for the people, and those public interests which are directly affected by the success or failure of the ministry of Health.

The grievances of which the medical profession has to complain are many, and the manner in which its appeals have been treated has been vexatious; but we do not propose to do more than call to mind one or two matters that demand prompt and grave consideration. First, there is the obstinacy with which the refusal to recognise a pressing need of medical counsel in regard to matters of social and domestic reform and reconstruction has been maintained. Wise in their own conceits, great officers of State and public administrative bodies—from the Privy Council itself down to the Metropolitan Board of Works and those troublers of the social peace, the local school boards—have rejected every entreaty and remonstrance submitted in the interests of scientific progress and even common expediency. The Privy Council still relies on quarantine as a mode of protecting the home country from imported disease, thus clinging to a policy which has been not inaptly characterised as "grandmotherly"; while the Metropolitan Board of Works, in sublime ignorance of the rudimentary principles of sanitary work, inflicts suffering on the poor and expense on the ratepayers; and school boards, blindly carrying out the letter of the law in violation of its spirit, have already done much to convert institutions which were intended for the good of the rising generation into nests and foci of disease. One important source of all this folly and mismanagement is the refusal to seek and act upon medical advice. The departments of public administration are neither organised so as to work together for the public advantage, nor set wholly apart with independent spheres of authority. Serious conflict must ensue if epidemic disease should invade the country, and it will then be too late to take counsel, because there will barely be time to act. A Minister of Public Health, aided by competent medical advisers, or even a Medical Board composed of officers attached to each department, from the Privy Council to the Board of Works—which is *practically*, and ought to be in form, a Government department,—would remove all difficulties; but before any central medical authority can be constituted the Government must be convinced that the preservation of health should play a prominent *rôle* in legislation and administration, and this the present Government, we see too great cause to fear, is either not able or is unprepared to recognise.

If the Government of the day is acting on advice in its present policy with regard to public health, its counsellors are not in the confidence of the profession, or competent to shape its policy. The grounds of this presumption are abundantly evident. Take for example the manner in which Mr. SIMON, the greatest living authority on sanitary science, was permitted to retire a few years ago, and the persistent refusal to fill his place. Again, the strangely discourteous and unfair treatment received by Dr. FARR is not likely to strengthen the confidence of the profession; and there is too little reason to hope that the elevation of Dr. BUCHANAN to the office of chief medical adviser of the Local Government Board is to be the signal for a much-needed and timely development of the functions and powers of that department of the public service. Consider, too, the difficulty which has beset the task of extorting a minimum of justice for the medical officers of the army, and the doubts that still exist as to the value of a Warrant which does not improve on acquaintance, and only part of which is probably meant to be carried out. When will even so much as may have been conceded to the Army be wrung from the stolid indifference of the Admiralty for the Navy? The Arctic expedition was ruined by the refusal to serve out lime-juice in compliance with the instructions of the medical authority; the service, as a whole, may be ruined for want of a little common sense in dealing with the medical officers of the fleet. As the matter now stands, we strongly counsel intending candidates to hold back from the examination announced to take place in February. Let the authorities at Whitehall produce the terms of the contract, and enable the profession to see that henceforward the Medical Service is to stand on an improved footing, before the younger

members of our profession commit themselves. If the Navy is in want of surgeons, the Admiralty must come forward with a clear offer fairly drawn and finally sealed. The Local Government Board has declared its inability to grapple remedially with the grievances of the Poor-law officers. It remains to hope that hereafter the place of authority in local government may be ceded to a stronger and wiser administration. We do not care to extend the survey or to lengthen the catalogue of complaints. The result of the circumspect is simply this: if the Government has wisdom commensurate with its love of longevity, it will not overlook the need of doing something before the approaching day of vicissitude arrives.

To the west of the great mountain range which divides the main island of Japan into two halves, an endemic disease annually prevails at certain places during the time of the greatest summer heat, and is, on account of its danger, a source of terror to the inhabitants. These regions are in the vicinity of three large rivers, and each is sharply circumscribed, being part of the area over which the spring floods extend. But although the disease occurs only where the inundation has been, regions are flooded where the disease is not found; and in the east coast, where the floods are regular, it is unknown. That the immediate cause of the disease is a parasite is a popular belief even among Japanese doctors, suggested by the facts that it appears to arise by a sort of wound, that only those persons who are specially exposed to wounds from small animals—as reapers—suffer, and that the native name for the disease is in part that applied indiscriminately to small insects and worms. The native surgeons formerly asserted that a worm could be drawn from the wound, but it was apparently only a small thread of tissue adherent to the plaster by which the wound was covered. Later surgeons, unable to find a worm, thought they had discovered the cause of the disease in a small insect found upon the skin of the patients, but this, being brought to Tokio, proved to be the Leptus autumnalis or a congener. The better-informed practitioners in Tokio were inclined to regard the malady as an ill-described form of typhus or else true plague. Nothing more was known of it until, in 1877, KAWAKAMI, a medical student of Tokio, whose home was near the affected regions, studied the disease in his vacation, and brought an account so interesting that the following August was devoted by Professor BAELZ, of Tokio, to the study of the disease at the spot, assisted by KAWAKAMI; a temple being placed at their disposal as a hospital, the better to observe the affection. The result of this investigation is published in a most interesting article in the current number of VIRCHOW'S *Archiv*. The difficulties they encountered were not small, and had previously baffled several Dutch surgeons who had tried to study the disease. The natives had a profound distrust of European doctors, and at first refused to come into the hospital, and it was only by the help of the authorities that they were taken from the dim huts in which they lay in suffering heaps, a prey to myriads of fleas and mosquitoes, and in a state of dirt which defies description.

The definition which authors give of the malady—the "Japanese river- or flood-fever"—is that it is an acute, infectious disease, not contagious, appearing during the months of July and August in certain previously flooded places, of typical febrile course, beginning with circumscribed sloughing of the skin, and leading to swelling of the lymphatic glands and a cutaneous exanthem. The symptoms are, as a rule, most characteristic. The period of incubation is apparently four to seven days. Prodromata are always absent, or consist merely in malaise for a day or two. The disease manifests itself commonly on the sixth day after coming to the infected region, or after handling the hemp brought thence. The first symptom is a severe rigor followed by fever, and repeated in the course of the first day, with headache, throbbing in the temples, loss of appetite, and prostration, which knocks down even the strong, energetic natives at once. The first characteristic symptom appears on the second day, and consists of tenderness in some lymphatic glands, inguinal, axillary, or cervical. If the periphery of the region in which the glands are affected is then examined, there will with certainty be found a more or less dusky spot covered with a dry scale or scab. This circumscribed slough, resulting from a slight preceding ulcer, is the pathognomonic sign of the river fever, never absent. By this time the sufferers are scarcely able to stand. In their huts they huddle together as if for warmth. The face is red in the recumbent posture, pale in the erect. The patients whimper unceasingly throughout the attack, although they are unable to give any reason for doing so except the headache. They have an intense horror of the slightest breath of air, or of a drop of water being brought in contact with the skin. (The latter, however, is common with the Japanese in illness; when well, even the peasants bathe daily.) The temperature varies between 101° and 103° F. The pulse is relatively infrequent—80 in men, 100 in women. The skin is dry. In some part of the body, especially where the skin is moist, as the scrotum, axilla, hypochondrium, or elsewhere, is a round blackish spot, from 2 mm. to 4 mm. in diameter, with a slight depression in the centre. It is sharply limited from the adjacent skin, which is soft, livid-red, scarcely infiltrated. The black part is a dry, scaly slough, hard, and difficult to remove. The tissues near are not raised or tender. A few days later the crust can be removed, and a round crater-like ulcer is left, the bottom of which is not covered with pus, but with a consistent, tough, fatty mass. Suppuration thus plays little part in the process; there is rather a dry, granular destruction of the tissues.

No distinctly inflamed lymphatics can be traced up to the nearest glands, which are, however, invariably swollen and tender, as also are, in a short time, all the accessible superficial glands. Catarrhal conjunctivitis commonly occurs. The throat is normal. Cough, with catarrhal râles, is frequent. The spleen is constantly enlarged; the urine free from albumen; the bowels obstinately constipated. During the next two days the fever increases constantly, reaching 104° by the evening of the fifth or sixth day; it is commonly continuous, rarely remittent. The frequency of the pulse is always relatively low. On the sixth or seventh day there is an increase in the fever and restlessness; and the exanthem appears, commonly first on the temples and cheeks, in the form of large flat papules of dark-red colour, similar to the spots of measles. Simultaneously, or a few

hours later, similar spots appear on the forearms, legs, and back. The eruption is indistinct on the thighs and upper arms; the throat and neck commonly remain free. Between the larger papules small lichen-like spots appear. The eruption lasts from four to seven days, and gradually becomes indistinct. In slight cases it may be visible for a day only. It marks the height of the disease, and then there is frequently delirium at night, deafness, dry lips and tongue. The ulcer now suppurates; cough is common and is sometimes severe; bronchial râles are heard, but no dulness is found; the enlargement of the spleen is commonly moderate, the constipation permanent, the urine scanty but still free from albumen. About the end of the second week morning remissions appear in the pyrexia, the patient's condition gradually improves, slight diarrhœa replaces the constipation; convalescence is rapid. Slight cases, in which the patients are confined to bed for a day or two only, constitute about 25 per cent. of those observed, and do not appear to be associated with slightness of the local affection, since in one patient who was not confined to bed at all, the ulcer was two centimetres in diameter. The most severe cases, often fatal, are accompanied with high fever, acute parotitis, copious bloody stools, coma, mania, cardiac failure, or œdema of the lungs. Pregnant women usually miscarry and die. The average duration of the disease is about three weeks, of which time the febrile period occupies the greater part, convalescence only a few days. Rarely the fever lasts a month, and convalescence is then slower. The common mortality of the disease appeared to be about 15 per cent., although no case which was treated by the observers died. The number affected is about 8 per cent. annually of the population of the affected districts, the total annual number of cases being about three hundred.

Professor BAELZ did not succeed in obtaining a single post-mortem. In 1877 KAWAKAMI made two, but was able to find no characteristic lesion in the internal organs. The blood was fluid, the heart soft, the spleen enlarged, and its capsule slightly inflamed; the mucous membrane of the small intestine presented here and there red, injected, raised spots, not always corresponding to Peyer's patches, and wholly unlike the appearances in typhoid. The mesenteric glands were swollen, and the peritoneum injected.

Regarding the etiology of the disease, the authors discuss at length the theory that it is connected with the mite mentioned above, but reject it on the ground that this, although capable of burying itself in the skin, is extremely common, and that in many instances which came under their notice, in which the insect was not extracted, no disease followed. In not one case of the disease, on the other hand, did the microscopical examination or any ascertained facts support the theory. They are inclined to regard it as a miasmatic affection, the poison differing, however, from ordinary miasma in its slight volatility and limited action, attaining its development only in the greatest heat of summer and in certain localities. Hemp is chiefly grown on the land where the disease occurs, and only those persons who cut the hemp suffer; very rarely those who draw the boats. The former stand all day bent, exposing their bodies to the exhalation from the ground. In the first two or three years after land has been reclaimed it is relatively innocuous, and so also are parts where the land has been long in cultivation, although the floods still cover it annually. In the first year or two only reeds grow on the sand, then come pampas grass and other herbaceous plants, which, by their decay, fertilise the ground and form a soil, and while this is soft and porous the disease appears. When the soil has attained a considerable thickness the disease disappears again. The poison is, however, transportable, although in limited quantity, by the hemp, perhaps by fragments of soil adhering to it. The nature of the poison is unknown. Bacteria could be found neither in the blood nor in the wound, but the examination was scarcely exhaustive. It is conjectured that the poison obtains entrance through an abrasion in the skin, which occurs most readily in the softest and moistest part, where the local lesion most frequently presents itself, and by producing such an abrasion the mite referred to may perhaps play a part in its production. The disease is distinctly not contagious from person to person. Experiments to inoculate animals with the disease failed entirely. One attack affords no protection against another, and neither age nor sex influences the tendency to suffer from it.

The treatment of the cases which came under observation was chiefly symptomatic and all recovered. Salicylate of soda had a distinct influence over the fever—more marked than that of quinine.

The pathological interest of the disease is very great. It apparently stands nearer to such diseases as anthrax than to the ordinary malarial fevers, and it can hardly be doubted, from our present knowledge of such affections, that it owes its origin to a saprophyte. But in its apparent mode of origin, of infection, and in relation to the symptoms, it is a malady of the greatest interest. Prophylactic measures—the growth of the eucalyptus, &c.—have been suggested and are to be adopted, and it is to be hoped that this last addition to the diseases to which humanity is heir may be the first to disappear. Meanwhile our thanks are due to the investigators, who have given us such important facts regarding it, and who, we may hope, will investigate still further the exact nature of its cause.

MR. SECRETARY CROSS has addressed a letter to the Metropolitan Board of Works on the subject of their administration of the Metropolitan Streets Improvement Act of 1877, which is of far wider interest than the immediate matter to which it refers. It deals, indeed, with a fundamental principle which, according to the Home Secretary, should govern the action of local authorities who have to put in force the special law as to artisans and labourers' dwelling-houses, and which, in the metropolis at least, was in danger of being lost sight of. A short time since a deputation of the Metropolitan Board of Works waited upon Mr. CROSS, and asked to be relieved from certain difficulties which they had experienced in carrying out the Improvement Act to which we have referred. In some instances they found that it would be more convenient and economical if they might provide house-accommodation for persons displaced by contemplated improvements in other places than in the area to be subjected to improvement. In other instances they wished to be allowed to clear the houses from certain areas acquired for improvement before making provision for the shelter of the families occu-

pying those houses, postponing such provision until an indefinite future. To each of these propositions Mr. CROSS has given an answer which will commend itself to the public at large, but which must tend to diminish the confidence of the metropolitan ratepayers both in the wisdom and business capacity of the Board of Works.

Mr. CROSS insists and requires (as he may) that the future housing of the families to be displaced shall be a primary consideration in improvement schemes to be submitted for his sanction. He is prepared (consistently with the principle of the Artisans and Labourers' Dwellings Improvement Act, 1877) to concede to the Metropolitan Board the substitution of one site for workmen's dwellings for another, if it be made clearly evident to him that the substitution will not involve a diminution of the house-accommodation to be provided, or inflict hardship on the people to be displaced. For example, it may be of little consequence to the unskilled labourer whether he live in Holborn or in Westminster; but there are many handicraftsmen to whom it might be of serious consequence to be compelled to move from the district where they at present reside, owing to its contiguity to the works they are engaged in; and all have serious interest in being located near to cheap markets. The Metropolitan Board proposes to displace a population numbering 7224, but to provide house-accommodation for only 5623; moreover, the Board has given no specific information, apparently, to the Home Secretary as to the industrial requirements of the persons to be displaced, in view of the proposed substitution of sites. Mr. CROSS observes that, before assenting to the proposal of the Board in regard to substituted sites, he must have "clear proof that the substitution would not cause practical inconvenience to the class of persons displaced." Again, as to the proposition of clearing sites before house-accommodation is found for the people who would be displaced, the Board seeks to show that the amount of inconvenience to which the displaced people would be subjected might be less than anticipated, for a site already cleared by them has never been actually used, and the persons sent adrift have, in reality without their assistance, found accommodation elsewhere—with what difficulties and injuries to themselves is not told; but obviously their dispersion gave no trouble or anxiety to the Board. Upon this Mr. CROSS justly observes: "Such a plea, it is plain, amounts to an admission that the Board have been unable to carry out the provisions made by Parliament in the Streets Improvement Act (1872); and the Secretary of State would not be justified in sanctioning an arrangement by which the non-performance by the Board of their obligations under one Act would be used to facilitate the performance of obligations under another Act." Mr. CROSS, acknowledging the difficulty of administering the Streets Improvement Act, suggests a certain and more reasonable mode of procedure to the Board, by which the municipal and public health advantages of the law may equally be secured.

It seems to be quite clear from Mr. CROSS's letter that the Metropolitan Board were prepared to secure desirable street improvements with the least amount of trouble to themselves and forethought as to the evils they might be creating elsewhere in the metropolis. Of what avail to clear away unhealthy areas in one part of the metropolis if the clearance is to determine unhealthy areas in other parts? Yet this would appear to have been the (unrecognised, perhaps) policy of the Board until now checked by the Home Secretary's letter. In truth, the Board appear to have been gradually losing sight of the fact that the clearances in which they have been engaged and wish further to engage are fully as much questions of public health as municipal convenience. The advantages from the municipal side are obvious, but the advantages to be obtained on the public health side involve complicated considerations which are as difficult of apprehension as of solution. The advantages of getting rid of an unhealthy area are apparent, but to get rid of it without creating another unhealthy area by the crowding of the displaced population into places already overburdened with people is a question of the greatest complexity, and one with which the Board is unprovided with the means of dealing properly. It is a question which peculiarly requires the sustained attention of a competent medical man, but the Board does not possess a Medical Officer. And this is not the only question where the Board fails of a just apprehension of its duties from want of a medical adviser.

CONSIDERABLE astonishment is from time to time excited in professional circles by the strange impressions produced in the public mind by newspaper paragraphs describing medical work. There is nothing new in the phenomenon. A few years ago there were certain statements which seemed to form the stock-in-trade of newsmongers, and, the supply being limited, the same material reappeared at short intervals scarcely under a new guise. For example, it used to be announced about every six months as a discovery that ether and chloroform combined in certain proportions formed an anæsthetic which was free from the alleged injurious properties of pure chloroform. With a distinct class of equally hackneyed assertions this particular paragraph has ceased to reappear. Unhappily we are threatened with a new eruption. It would seem that electricity is to form the topic of revived interest. A contemporary not given to napping has placed its columns at the disposal of some one who appears to think that the medical profession is very much in the dark as to the value of electricity as a remedial agent, and is likely to remain so, because, forsooth, the use of the remedy is "troublesome and tedious, requiring patience and sacrifice of time." Because this is the fact "the belief in its efficacy is theoretical rather than practical with the great majority of the medical profession"! The assertion does not, obviously, call for contradiction. Those who know anything of medical work will not need to be informed that the measure of usefulness to be credited to electricity as an agent, both in diagnosis and in treatment, has been most carefully estimated. It has been tested, expounded, discussed, and to a certain extent exposed, in all its varieties. The medical profession has bestowed and is still bestowing fully as much attention on the subject as it claims. The knowledge of its uses and abuses has been, and still is, being extended; and at every hospital in the kingdom, medical men have recourse to electricity in each and every one of its forms in cases which seem to require it. So far from its being a fact that the "medical value" of electricity "has never yet been fairly and exhaustively tested," the practice of every

general hospital bears witness to its use; while our own columns show the great, almost excessive, attention which has been given to the subject. It is greatly to be regretted that erroneous impressions of professional work should be created by statements which could not fail to be corrected if they were examined in the light of simple facts. We should not have alluded to the matter but that the assertion with respect to electricity, to which our attention has been called, is an aspersion on the work of every intelligent practitioner in the land.

Annotations.

"Ne quid nimis."

TRICHINOSIS ON BOARD THE SCHOOL-SHIP "CORNWALL" IN THE THAMES.

WE learn that a somewhat considerable outbreak of trichinosis has occurred on board the reformatory school-ship *Cornwall*, lying off Purfleet, on the Thames. The disease first manifested itself several weeks ago, and was at first believed to be enteric fever, for which disease trichinosis is, in the beginning, very apt to be mistaken. The persistence of the malady among the boys, and certain anomalies, as it seemed, in its progress, induced the Committee of the ship to apply to the Home Secretary for additional skilled assistance in investigating the outbreak. He applied to the Local Government Board for the help of one of their medical inspectors, and Mr. W. H. Power was directed to visit the ship. This gentleman, after careful inquiry, became suspicious that the disease among the boys was trichinosis, and application was made to the Home Secretary for permission to exhume the body of the only youth who had died of the malady. Permission was granted, and it was ascertained beyond a doubt that the lad had died from the disease named; and Mr. Power's suspicion was thus confirmed. It is understood that the malady was caused by the consumption of certain American pork. Mr. Power's inquiry is, we believe, not yet fully completed, and until his report appears the details of the outbreak will not be accessible. We trust that the report will be issued as early as practicable to the public, for it cannot fail to give much and most valuable information concerning a disease from which the people in this country have hitherto had a remarkable immunity in its acute form—an immunity which, it is to be feared, since the large and increasing importation of foreign pork, is becoming a thing of the past.

THE ZULU WAR: SECCOCOENI EXPEDITION.

WE have received a letter from our correspondent at Fort Webber, dated the 20th November, a few days before the storming of Seccocoeni's stronghold, describing the further medical arrangements planned for the expedition by Surgeon-Major B. C. Kerr, the Senior Medical Officer in the Transvaal. As previously determined, Fort Middleburgh remained the base, the badly wounded and serious cases of illness being removed there till fit to be transported to Pietermaritzburgh. The lady superintendent and two of the trained Netley nurses had arrived for duty, and brought a welcome addition to the medical stores in the shape of a waggon-load of medical comforts and supplies provided by Mr. Young, through the liberality of the National Aid Society. Surgeon-Major W. Johnston had been placed in medical charge of the Field Hospitals at Fort Webber. These had been rendered complete by the arrival of pharmacy and surgery waggons from Natal. The Bearer Company had made considerable progress during the last month, owing to the indefatigable exertions of Surgeon-Major Hector and Surgeon Lloyd in drilling and instructing the raw material placed at their disposal. The Company consists of a detachment of Europeans 52 strong, taken from the 21st and 94th Regiments, 25 men of the Army Hospital Corps, and 70 Kaffirs. In action the men are told off in parties of four to a stretcher, a private of the Army Hospital Corps, who carries a field dressing-bag, and who will act as dresser, accompanying each. Prior to the assault, dressing stations or the second line of surgical assistance were fixed by the senior medical officer in conjunction with the military authorities; at these the Army Hospital Corps men, with water, medical comforts, and the necessary surgical appliances, were stationed, medical officers supervising the arrangements. The natural difficulties of the country in which the operations were carried on forbad the use to any extent of the heavy four-wheeled ambulances; the native stretcher-bearers, therefore, took their place in the first line of assistance. Sir Garnet Wolseley, accompanied by his personal staff, inspected the Bearer Company on the 18th, and expressed himself greatly pleased at the careful and efficient manner in which they went through stretcher drill, lifting and carrying wounded, dressing and applying splints and tourniquets, &c. The weather had been unusually stormy and wet—heavy thunder showers of daily occurrence. The troops were, however, in good health, and in capital spirits at the expected brush with Seccocoeni's warriors.

ARM-TO-ARM VACCINATION.

IT has been curious to note how largely the recent discussion in the general press on the merits, or rashly assumed demerits, of arm-to-arm vaccination has been a mere revival of former—and, as it was hoped, ended—discussions on the subject. It has not been less curious to note how little the parties to the discussion appear to have been aware of this fact. But the strangest aspect of the discussion has been the obvious unfamiliarity of the depreciators of arm-to-arm vaccination with the principles guiding its public administration in England. So true is it that prophets (public benefactors) have little honour in their own country. The doubts which have been so freely expressed by a few persons on this question of late have, in the main, arisen from misapprehension, and it would seem that much of this misapprehension has occurred from want of ready information, or of a means to get at information, relative to the principles and practice of the operation in this country. We are appealed to by numerous individuals to indicate some easily accessible source whence may be obtained a trustworthy knowledge relating to vaccination and the practice of vaccination in this country. We have great pleasure in responding to this appeal. There is, happily, an English work which fully meets the requirements of our correspondents, and which should be in the hands of all persons who take an interest in the discussions on vaccination which have recently occupied so much attention in the general as well as the medical press. We refer to the "Handbook of Vaccination," by Dr. Edward C. Seaton, the late Medical Officer of the Local Government Board. This compendious work, published by Messrs. Macmillan and Co., contains a masterly summary of our knowledge respecting vaccination, and a most perspicuous statement of the principles which govern the administration of public vaccination in this kingdom. Dr. Seaton treats in succession of cow-pox as observed in animals and man, and of the relation of cow-pox in animals to small-pox in man; of the history of vaccination and the method of vaccinating; of the arrangements for the maintenance of lymph-supply and the conveyance and storage of lymph; of skill in vaccinating; of the alleged degeneration of lymph and of recurrence to the cow; of revaccination; of stamping out local outbreaks of

small-pox; of objections to vaccination and the alleged dangers of the practice, and of the laws relating to vaccination. Clearly and tersely written, this work is a model text-book.

PATHOLOGICAL SOCIETY.

AT the annual meeting of this Society, held on Tuesday last, the following gentlemen were duly elected its officers for the ensuing year:—President: Mr. Jonathan Hutchinson. Vice-Presidents: Drs. Geo. Buchanan, Geo. Harley, J. E. Pollock, Hermann Weber; Messrs. Christopher Heath, T. W. Nunn, S. J. A. Salter, S. W. Sibley. Treasurer: Mr. J. W. Hulke. Honorary Secretaries: Dr. J. F. Payne, Mr. W. Morrant Baker. Council: Sir J. Fayrer, M.D.; Drs. T. Barlow, E. B. Baxter, Sidney Coupland, W. S. Greenfield, J. Pearson Irvine, W. M. Ord, F. Taylor, T. T. Whipham, J. Williams, W. B. Kesteven; Messrs. J. N. Davies-Colley, R. J. Godlee, J. W. Haward, H. G. Howse, J. Lister, J. McCarthy, W. MacCormac, W. J. Smith, W. W. Wagstaffe.

The annual report was read by the secretary, and, on the motion of Mr. Robinson and Dr. Mahomed, was adopted, and ordered to be printed and circulated. Dr. Savage proposed a vote of thanks to Dr. Douglas Powell, the retiring secretary, and spoke in high terms of the value of his services, and particularly referred to his work as editor of the three last volumes of the Society's Transactions. Mr. Butlin, in seconding the motion, alluded to the marked courtesy which Dr. Powell had always shown to all the members of the Society, and the President added that he was personally greatly indebted to Dr. Powell. The motion was carried by acclamation, and briefly acknowledged by Dr. Powell. A vote of thanks to the retiring vice-president (Mr. Bryant) and the retiring members of the Council was moved and seconded by Dr. Thin and Mr. Parker, and acknowledged by Dr. Green. In future the specimens shown by card will be taken alternately with the other specimens, and not all together at the end of the meeting, as has been the custom hitherto.

THE HEALTH OF THE NAVY.

THE Director-General of the Medical Department of the Navy has just issued his Report on the Health of the Navy in 1878. It appears that the main strength of the force afloat during the year was 46,000, among whom the average number of men daily sick was 47·15 per 1000, showing an increase of 4·34 per 1000 upon the sick-rate that prevailed in 1877. The sick-rate at the various stations ranged from 24·94 on the south-east coast of America, to 60·33 on the China station. The number invalided during the year was 1662, equal to 35·81 per 1000 of the force, which scarcely differed from the rate in the preceding year. The total number of deaths reported during the year was 669, including 247 from disease, and 422 from drowning and other forms of violence. The death-rate from all causes was equal to 14·41 per 1000 of the mean strength of the Navy; of this 5·32 was attributed to disease, and 9·09 to violence. No less than 311 of the deaths in the year were due to the loss of the *Eurydice*, exclusive of which the death-rate of the navy from all causes during the year did not exceed 7·71 per 1000, and was but 0·66 higher than the rate in 1877. The value of these sickness and mortality rates, as a true test of the health of the navy, is seriously disturbed, if not destroyed, by the large proportion of invaliding recorded; this prevents the possibility of comparing these rates with those that rule among men of similar ages engaged in other occupations. It is evident that but for this invaliding, which amounted in 1878 to 35·81 per 1000, both the sickness and the mortality rates would have been far higher. Any change, moreover, in the conditions which govern the invaliding of men in the navy would destroy the value of any comparison between the rates of sickness and mortality prevailing in different years. In proof of this it is only necessary to point out that the sickness and death-rates at the ages fifteen to twenty-five were higher than at any of the three other age periods, twenty-five to thirty-five, thirty-five to forty-five, or forty-five and upwards. The true explanation of this is that the invaliding rate ranged from 33·09 per 1000 in the earliest, to 54·33 in the latest of these four age periods. Making due allowance, however, for this disturbing element of invaliding, the comparatively high sickness-rate among the force aged between fifteen and twenty-five years is deservedly worthy of note, being more than double that which prevailed at the ages of forty-five years and upwards. This excess of sickness-rate among the younger sailors is mainly due to the greater prevalence of venereal disorders, and the apparently greater liability to wounds and injuries. The value of the statistics in the report is seriously impaired by the omission of any summary tables admitting of the comparison of results for a series of years. This omission has been noted in previous Reports, and we regret to find it repeated on the present occasion.

THE PLAGUE.

ALTHOUGH there has been no serious alarm of plague in the East since the cessation of the outbreak on the Lower Volga in February last, the disease, it would appear, has not been altogether inactive. Rumours from time to time spread through the Levant, in the course of the past summer, that plague had shown itself again in more than one spot of Persian Kurdestan, on the Ottoman frontier, but these rumours died out, and there does not seem to have been any substantial ground for their existence. But we now learn that a circumscribed outbreak did occur in the course of last year in the western highlands of Arabia. The scene of this outbreak was the Asayr district, Yemen, where plague, according to the Parliamentary paper on the subject published last year, appeared in 1853 and in 1873-74. The outbreak of last year is believed to have begun in February, and had not ended at the time of the latest news, November. It would almost seem as if plague were endemic in this mountainous district of Arabia, as it appears to be among the mountains of Kumaon, North-Western India, and the mountains of Yunnan, Western China.

In the Russian Society of Public Health, on the 29th ult., a paper was read relating to a project for the formation of a scientific expedition, having for its object the examination of the districts on the Lower Volga from a sanitary point of view. On the termination of the outbreak of plague in these districts early last year, it was understood that the Russian Government proposed to subject these districts to an exhaustive investigation, and particularly the delta of the Volga, with the view of elucidating, if possible, certain obscure facts relating to that outbreak, and investigating generally the sanitary condition of the towns, villages, and peoples on the Lower Volga. It does not appear whether the scheme considered by the Society of Public Health is the Government project referred to, or another proposal. The cost of the measures taken by the Russian Government in the winter of 1878-79 to arrest the progress of plague on the Volga is returned at 2,000,000 roubles or thereabouts.

We learn that the Plague Committee of the Royal College of Physicians has not been called together since Surgeon-Major Colvill's and Dr. Payne's report of their mission to Astrakan has been published; and we are informed that copies of that report have not even been furnished to the members of the Committee. The momentous questions as to plague in its relation to this country nevertheless exist,

although the outbreak on the Lower Volga may be at an end; and it is not easy to explain the collapse of interest in the subject on the part of the Royal College of Physicians, after the extraordinary parade of an assumed public mission to be fulfilled, with which the profession and the people generally were favoured by that body last year.

SPLENOTOMY IN LEUCOCYTHÆMIA.

EXCISION of the spleen has been proposed as a remedy for splenic leucocythæmia. The operation has, in other morbid states, been performed several times with good result, but in leucocythæmia it has always hitherto been fatal. The cause of death has, in most cases, been that which a study of the symptoms of the disease would suggest, hæmorrhage. The tendency to bleeding, in cases of pronounced leucocythæmia, is very strong, and Professor Mosler, of Greifswald, has lately, in an article in the *Zeitschrift für Klin. Med.*, discussed this tendency in its relation to the proposed operation. He describes at length a case of the disease in which the patient was anxious to undergo splenotomy but was dissuaded, and, as the result proved, wisely. He had manifested no tendency to hæmorrhage, but had had several perineal abscesses, and after one had been opened, profuse bleeding occurred, only arrested by the thermo-cautery, renewed a few days later, and again arrested with difficulty by digital compression and plugs of perchloride of iron. Recovery took place for a time, but the patient died some time afterwards from spontaneous retroperitoneal hæmorrhage. The hæmorrhagic tendency is illustrated by the cases Mosler has himself watched, twenty-five in number, in thirteen of which hæmorrhages occurred, and which show that in every form of the disease, without relation to age or sex, or duration of disease, the hæmorrhagic tendency exists, and may cause bleeding either at the surface or into organs. These facts lead Mosler to the conclusion that neither in the early nor in the late stage of leucocythæmia is splenotomy justifiable, and, indeed, that operations even of the most trifling character are to be as far as possible avoided. Moreover, he believes that even in simple enlargement of the spleen, after intermittent fever, the operation is unjustifiable, since there is often, in these cases, also a strong tendency to hæmorrhage. But in some cases of this character the operation has been successful, and the tendency to hæmorrhage probably depends on the actual state of the blood, which we are now able to ascertain with more exactness than was formerly the case.

MEDICO-SANITARY NEWS FROM RUSSIA: DIPHTHERIA AND TRICHINOSIS.

A COMMITTEE of the Red-Cross Society has been engaged in preparing a scheme of action for the sanitary detachment which is about to be sent to Poltava, to aid in arresting the ravages of diphtheria there. The Committee consists of Drs. Zdekauer, (chairman), N. Bystrow, N. Kozlow, C. Rauchfuss, B. Reutz, N. Rozow, B. Petrow, and L. Tomaschevsky. Drs. Tsytsarine, Zablotsky-Desiatovsky, and Manonow (vice-directors of the medical department of the Ministry of the Interior) have also given aid to the Committee in its labours. The Committee has held three sittings. In the first Dr. Bystrow proposed that the sanitary detachment should be formed of thirty medical men and three hundred sisters of charity. Dr. Rauchfuss objected that a detachment of the magnitude here contemplated would be unmanageable, and suggested that it should consist of a principal medical officer, ten other medical men, a veterinary surgeon, and one hundred sisters of charity, the work of the detachment to be limited to one district only. Dr. Reutz proposed that in place of establishing hospitals for young children in infected localities, it would be well to separate the healthy, and distribute them in places beyond the range of the epidemic activity of the disease. This proposition led to an animated discussion, but eventually it was determined that the question should be left open for the chief of the detachment to decide on the spot. The medical men are to receive 200 roubles pay per month; the sisters of charity 100 roubles, the former being also given an allowance of 300 roubles for personal expenses, and the latter 100 roubles, of which 50 roubles are for cost of travelling. The Princess Maximilianovna of Oldenburg has undertaken the organisation of the female element of the detachment.

The *Messager Officiel* publishes statistics of the mortality from diphtheria in the district of Mirgorod during the four years from November, 1875, to November, 1879. In 1875 the disease broke out in one of the villages of the district, attacking 141 persons and killing 30 (12 per cent.) In 1876 94 villages suffered from diphtheria, 5033 individuals having the malady and 1789 dying from it, the mortality in the several places ranging from 17·9 to 67·0 per cent. of the seizures. The greatest mortality was recorded in the months of April, May, October, and December. In 1877 the disease extended to 138 localities, the sick numbering 6459, and the mortality being 3024 (at rates in different places of from 40·0 to 58·6 per cent.) In 1877 the localities attacked numbered 135, the seizures 4487, and the deaths 1757 (28·0 to 55·6 per cent.) In 1879 the number of places attacked fell to 101, the seizures to 1535, and the deaths to 406 (range, 15·4 to 48 per cent.)

There has been an alarm of trichinosis in St. Petersburg, and it has been held necessary to place, for the moment, the sale of pork under supervision.

An inquiry into the health of the troops in St. Petersburg has disclosed the fact that the Guards have been more unhealthy than the troops of the line. This has occasioned some surprise, but, perhaps, needlessly so. It is not long since our own Guards were found to be more liable to sickness than the line, and the investigation which made known the conditions under which they lived in barracks showed also that this unenviable distinction was inevitable.

YELLOW FEVER.

IN the course of last summer the United States National Board of Health appointed a Commission to visit Cuba, and investigate certain points connected with the prevalence of yellow fever in that island. The Commission (styled the Havana Commission) consisted of Dr. G. M. Sternberg (secretary), Dr. S. E. Chaillé (chairman), T. S. Hardree, C.E., and Dr. J. Guiteras. The Commission visited Havana, Matanzas, and other Cuban ports; and an auxiliary Commission, consisting of the most distinguished medical men in the island, was appointed by the Spanish authorities to co-operate with them. The Commission having completed their work of inspection, a preliminary Report of results, by the chairman and secretary, is published as a supplement to the bulletin of the National Board of Health for Dec. 6th (No. 23). This Report states briefly the proceedings of the Commission, and then gives in some detail the principal results of the Commission's work. These are for the most part negative, but full of interest; and they afford clear indication of the great impulse the National Board will give to the comprehensive study of questions such as those involved in a consideration of the endemicity and propagation of yellow fever. The Report, indeed, may be described as the shadow of good things to come rather than as the good things themselves. We must crawl before we leap; but the method of crawling is an important item in estimating the probable success of the leap which is to follow, and the method taken is a very sound one, and such as will surely link a not infertile past to a more fertile future. The parts of the Report of more immediate interest are those relating to the insanitary condition of the ports of Cuba and the causes thereof, and the

origin of yellow fever in ships and harbours. The part played by the ship as a carrier of yellow fever infection, and the relation of the vessel to an infective locality in becoming infected, are points of cardinal importance, of which the line of inquiry for a full elucidation is indicated. With this sample of the Commission's work, the full report of its results will be looked for with much interest.

THE PARKES MUSEUM OF HYGIENE.

ON Saturday, Jan. 3rd, a series of practical demonstrations of the uses of sanitary appliances, as exhibited in this museum, was commenced. Mr. Mark H. Judge (Curator), in introducing Prof. Corfield, explained that these demonstrations had been arranged for by the Committee of the Museum and the Council of the Working Men's Club and Institute Union. The address that day would be on "House Drainage"; this would be followed on alternate Saturdays by others on "Ventilation, Lighting, and Warming," by Prof. Corfield; "Food," by Dr. G. V. Poore; "The Hospital and Sick-room," by Dr. J. C. Steele. Admission to these demonstrations would be by tickets issued by the Club and Institute Union.

Professor Corfield, in his address, called the attention of his audience to the principal sanitary appliances connected with house drainage, commencing with the various kinds of drain-pipes, and leading up to the large variety of water-closets which were in the museum. He spoke with approval of Stamford's patent drain-pipe joints, syphon gullies, Field's self-flushing tank, and several kinds of disconnecting traps, made expressly for the purpose of cutting off the air communication between house sewers and public sewers. Specimens of defective plumbing were shown and explained. The address was listened to with considerable interest, and at the close the professor received the hearty thanks of those present.

UNQUALIFIED DISPENSERS.

A RECENT case of poisoning by misadventure recalls to memory a long series of similar "accidents" of the most painful character. It is more than time the Legislature expressly prohibited the sale of medicines by women and boys, whether acting under the personal direction or in the absence of the responsible keepers of chemists' shops. If drugs were classed as dangerous articles, and their sale without a medical prescription were interdicted, there would be some guarantee for safety. As it is, the lives of the public are at the mercy of chance. Certain qualifications are required to entitle a man to practise medicine, but any one who can obtain employment in a druggist's shop may compound and sell medicines. If it suits the retail trader in poisons to save the expense of a competent assistant, he may leave some female member of his household or a shop boy in charge; and while he has "just stepped out," an unsuspecting customer may be victimised. This is a difficulty in view of which the law should be strengthened. It is abundantly evident that, except under the pressure of might, right will not prevail where trade interests are affected.

THE CABUL CAMPAIGN.

OUR correspondent with the 2nd Division Cabul Field Force, writing last mail, describes the working of the field medical arrangements, under the "general system," as most satisfactory. The sick carriage is placed under the control of the Principal Medical Officer and concentrated in one camp, the doolie bearers are suitably housed, clothed, and fed, and provision can be made at any moment for transporting sick and wounded to the base. A proof of the efficiency of the system was given on the 23rd November, when a large convoy of invalids from Cabul were noted to arrive at Sei Baba *en route* to the base hospital at Peshawur. Carriage was required for eight officers, sixty-one European, and one hundred and seventy native soldiers and followers. The strain was met without difficulty, doolies, hill dandies, and ponies, with extra bearers, on account of the bad roads, being despatched without delay. Dr. Hassard has organised field hospitals for native regiments and camp followers at Lundi Kotal, Jellalabad, and Gundamak, the one at Jellalabad, placed under the charge of Surgeon-Major Tippets, accommodating two hundred sick. When not engaged in transporting sick, the doolie bearers are most usefully employed in cleaning camp grounds, levelling roads, &c., a systematic distribution of them daily being made to the commissariat and quartermaster's departments. Sections of the field hospital are ready to start at a few hours' notice complete in *matériel*, *personnel*, and transport. At Cabul itself the cold weather has set in early and with great severity, a thermometer inside a tent registering 24°. Surgeon-Major S. B. Roe, 92nd Highlanders, has been appointed to the charge of the Field Hospital in the Shurpur cantonment. Supplies of warm hospital clothing were being despatched from Peshawur, to Cabul, as quickly as transport could be procured.

AN ANOMALY.

IN the licences required by the Inland Revenue and the exemptions which are allowed there is not a little to occasion wonder. The medical man to whom a coachman or groom is practically indispensable, not as a matter of luxury, but for the simple conduct of the laborious business by which he earns his livelihood, is required to pay a tax of fifteen shillings annually for each man so employed. And if he keeps a man or boy to open the door to his patients there is another fifteen shillings to be paid. But the "retailer of *intoxicating* liquor" (we quote the exact phraseology) has nothing to pay "for any servant wholly employed by him for the purpose of his business." One would suppose, to see the pothouses elbowing each other in every street, that our legislators hardly needed to exhibit such anxious care to facilitate the sale of intoxicating liquor. Nor can it possibly be necessary to remind them that to "intoxicate" signifies (according to Webster) to "make drunk." But drink is not the only luxury upon which the Commissioners of Inland Revenue look with a favouring eye. No licence is required for game-watchers, who do not carry guns or act as gamekeepers, nor for grooms in public racing stables, employed solely in taking care of race-horses!

THE TREATMENT OF SEWAGE.

A REPORT has been prepared for the Local Government Board by Dr. Angus Smith, F.R.S., on the results of certain processes for the purification of sewage water, a contribution, as it would appear, to a larger work on the treatment of sewage in the course of preparation, by Mr. Robert Rawlinson, C.B. Dr. Smith's report is entirely confined to an examination of effluent waters as observed at the sewage works of Aldershot, where irrigation alone is used; Coventry, where precipitation by alum and iron is used first, and irrigation afterwards; Birmingham, where precipitation by lime is employed; Burnley, where also lime is employed; and Aylesbury, where the A. B. C. process is used, a precipitant of alum being employed, also clay. The details of the report are of considerable interest, but the general results as regards the several effluents were as follows:—None of them could be called sewer water in the ordinary sense. The best result was obtained by irrigation, when the weather was not so wet as to cause overflowing. Still it was not found very successful after lime at Birmingham. Precipitation with alum and iron compounds comes

next. In wet weather there was an advantage in precipitation, because the action was largely, if not wholly, independent of dilution. The lime process was valuable, but not equal to the above precipitation processes.

DEATH OF MR. HENRY HANCOCK, F.R.C.S.

WE regret to announce the death of Mr. Henry Hancock, F.R.C.S., in his sixty-eighth year. The funeral took place on Tuesday last, at Chute Standen, Wilts. It was very numerously attended by all classes, both rich and poor, and by many of his professional colleagues from London. Amongst the principal mourners were Captain Heaton, Mr. Hancock, Rev. —— Horton, the President of the College of Surgeons (Mr. Holden), Mr. Trimmer, Dr. W. J. Lush, and others. At the meeting of the Council of the College of Surgeons, on Wednesday last, the President referred in feeling terms to the serious loss they had sustained in the death of Mr. Hancock, who was one of the senior members of the Council. An obituary notice will appear in our next issue.

DR. ANDREW DUNCAN.

WE are glad to hear that this distinguished young surgeon is convalescent from the effects of his severe wound received at Cherasiab. A bullet struck Dr. Duncan in the back, and passed out in front of the chest. It was feared that the lungs had been seriously injured; fortunately for him, however, the bullet was diverted from its course, and passed round between the integuments of the chest-wall. A severe attack of pleuro-pneumonia subsequently supervened. When our advices left India, Dr. Duncan was in a fit state to travel, and he was ordered down to India, as it was feared that the cold in Afghanistan would be too extreme for him to bear.

VIOLENT DEATHS AT CHRISTMAS-TIDE.

THE Registrar-General's last Weekly Return affords, from a sombre point of view, evidence of some of the results of recent Christmas festivities in London. During last week no less than 93 of the deaths registered were caused by various forms of violence, 87 being referred to negligence or accident; 32 resulted from fractures and contusions, 16 from burns and scalds, 5 from drowning, and no less than 28 were of infants or children under five years of age from suffocation. Seven persons were killed in the streets of London, and five on different railways; six died in consequence of falling downstairs. The cases of infant suffocation are always excessive at Christmas time, and the recent excess has been greater than usual. So with the deaths of children from burns and scalds, which were last week nearly double the corrected average weekly number.

The constant recurrence of this increase of violent deaths at Christmas time places their connexion with the festivities incidental to the season beyond question. The indirect influence of this annual celebration of Christmas upon public health in England it is impossible to calculate.

ILLNESS OF SIR DOMINIC CORRIGAN, BART., M.D.

THIS distinguished physician is, we regret to learn, in an extremely precarious condition. He is attended by Drs. Banks and Cruise.

DEATH FROM CHLOROFORM.

A PATIENT died recently in the Royal Infirmary, Liverpool, while under chloroform, for removal of bone from the leg. We are informed that the post-mortem revealed extensive adhesion of the pericardium. It is said that the patient desired to have chloroform, and had inhaled it on three previous occasions.

A PARAGRAPH is going the round of the Indian papers relative to the suicide of a young surgeon, Dr. Dumbleton, on his way with a detachment of troops from Peshawur to join the Kurram Valley force. It would seem that he was attacked with severe fever on the march, and, exhausted by the combined effects of the disease and protracted riding (he being an indifferent horseman), when called upon to resume the march one morning, he shot himself. There are certain inconsistencies about the statement in the paragraph which lead us to hope that the version given of the circumstances under which Dr. Dumbleton came to an untimely end may be, in fact, founded on misapprehension. He was a student of St. Bartholomew's Hospital, and joined the Indian Medical Service in March last.

AT a special meeting of the Council of the Royal College of Surgeons on Wednesday last, the 7th instant, Mr. Hulke, F.R.S., was elected a member of the Court of Examiners in the vacancy occasioned by the resignation of Mr. Curling, F.R.S. Mr. Hulke and Mr. Wood have resigned their seats at the Board of Examiners. The President, Mr. Luther Holden, has, at the request of the Council, undertaken to deliver the next Hunterian Oration.

IN connexion with the Sanitary Institute of Great Britain, the Wyatt-Edgell Prize of £200 is offered for an Essay on "The Range of Hereditary Tendencies in Health and Disease." The award will be subject to the conditions usual in such cases. The essays must be sent in on or before Aug. 1st, 1880. Dr. B. W. Richardson and Dr. William Farr are appointed adjudicators.

SURGEON-GENERAL THOMAS CRAWFORD, M.D., has arrived at Madras, and relieved Surgeon-General C. Gordon, C.B., as Principal Medical Officer of the Madras Presidency. The latter officer, having completed a five years' tour of service, returns to England by mail steamer.

Correspondence.

"Audi alteram partem."

"THE SUNNY SOUTH."

To the Editor of THE LANCET.

SIR,—Very exaggerated statements having found their way into some of the English journals respecting the weather at San Remo and other parts of the Riviera, I ask your permission to make known the real facts in relation thereto.

No doubt the winter season here, so far as it has yet advanced, has been an exceptionally cold one; but, on the other hand, it has been remarkable for dryness and sunshine, and even the degree of cold reached has been but trifling compared with that which has prevailed in England and most continental countries.

Referring to my register for the month of November, I find that the mean minimum temperature—which, be it remembered, is for the most part a night temperature—was 48·4°, it having fallen below 40° once only during the month; and the mean maximum, or day temperature, 59·4°—the mean of both being 53·9°; that rain fell during that month on five days, the rainfall amounting to 2·4 inches; and that the sun shone for 182 hours out of a possible sunshine of 287 hours. It further appears that, to the 28th December inclusive, the mean minimum temperature was 39·0°, the thermometer having fallen below 40° on fourteen occasions and below the freezing point on three, the lowest point 27·9°, or 4° of frost only, being reached once only; that the mean maximum temperature was 51·6° and the mean of both the minimum and maximum 45·3°; that rain fell on three days only, the rainfall amounting to 1·6 inches; and that sun

shone during 201 hours out of a possible sunshine of 244 hours.

Now let anyone compare these figures with those for London or any part of Great Britain and they cannot fail to be greatly impressed with the remarkable difference shown in temperature, rainfall, and sunshine, in favour of the Riviera and of San Remo, to which place my observations more particularly apply. I may state that the instruments with which the observations were taken were of Negretti and Zambra's best, that they were placed in a north shade, and that they were freely suspended in the air, not being allowed to touch shutters, stone walls, or other cold substances. No doubt when so placed, or on the ground, the instruments would indicate lower temperature than those referred to above, but then they do not denote, as they should do, the temperature of the air itself.

About an inch and a half of snow fell on 1st December, and part of this remained on the ground and on the trees all night, a very unusual circumstance, and did not wholly disappear until eleven o'clock the following morning, when it quickly melted in the bright beams of the morning sun. It was the long continuance of the snow on the trees and flowers during the night of the 2nd December which injured the vegetation; but the injury in and near San Remo was mainly confined to the leaves of geranium, plumbago, heliotrope, and other tender plants, such as are usually found in England in greenhouses, the plants themselves being killed only in very few instances. In some situations the olives and lemons have no doubt suffered, but not the trees; although in San Remo itself I fail to discover any material injury even to the fruit. In my own garden, and in those of my neighbours, the lemon trees do not appear to have been damaged beyond the loss of a very few leaves.

Without entering into further details, I think I have now stated enough to show that, having regard to the extraordinary severity of the weather which has prevailed elsewhere, it has been at San Remo and some of the more sheltered parts of the Riviera surprisingly mild, dry, bright, and sunny; indeed, in this latter respect the Riviera has fully maintained its title to the appellation of the "Sunny South;" and visitors and invalids here have much to be thankful for in having been almost wholly spared the rigours of a winter which, in most other countries, has been almost Arctic. I am, Sir, yours &c.,

ARTHUR HILL HASSALL, M.D.

San Remo, Dec. 29th, 1879.

NERVE-STRETCHING IN TETANUS.

To the Editor of THE LANCET.

SIR,—As Mr. Morris, in his interesting letter in your last issue, mentions a case reported by me in the *Glasgow Medical Journal* for July, 1879, and quotes from my report, I trust you will allow me space for a few remarks to correct certain conclusions which Mr. Morris seems to me to have arrived at rather hastily.

I must take exception to his classifying my case with that reported by Verneuil, as the two have really very little in common, the latter being very chronic in character, and limited almost entirely to the upper extremity, whereas, in mine, nearly the whole of the muscles of the body were involved in the spasm.

In what sense does Mr. Morris use the word "chronic" as descriptive of the affection in my patient? If he uses it as indicating the period of onset of the spasms, I concur with him, but if he intends it to be applied to the character of seizure, I think a re-perusal of my report will convince him that the history of the case does not bear out his application of the term. He will notice that the spasms often recurred at intervals of two or three minutes, and involved the whole of the muscles of the trunk, including even the muscles of deglutition, and that the temperature reached 103°, and the pulse was for many days above 120; these points should, I think, remove it from the category of chronic tetanus.

Mr. Morris lays particular stress on the spasm which occurred soon after the operation, as showing that no good had been effected. Such a spasm has been noticeable in nearly every case which has been operated on, and the explanation of the phenomenon is so simple that I wonder Mr. Morris has overlooked it. The act of nerve-stretching must necessarily produce some disturbance in the nerve centre, and if the patient were not under the influence of an anæsthetic this would be at once shown by violent tetanic spasm; but the anæsthetic prevents this manifestation for a time, and it is only as its influence passes off that the spasm is felt.

My patient had no spasm, excepting the one which I consider due to the nerve-stretching, for about twenty hours after the operation; and the conclusion which I draw in the paper referred to is, "that nerve-stretching may for many hours arrest the progress of the symptoms in traumatic tetanus." My case "would therefore encourage further trials of an operation which is in itself harmless, in a disease the treatment of which has been hitherto most unsatisfactory and discouraging."—I am, Sir, yours very truly,

HENRY E. CLARK,
Lecturer on Anatomy, Glasgow Royal Infirmary School of Medicine.

Glasgow, Dec. 31st, 1879.

THE EFFECTS OF A FIXED IDEA.

To the Editor of THE LANCET.

SIR,—The following case, showing the curious effect of the imagination on a healthy and strong man, may be interesting to your readers, and throw some light on several cases of hydrophobia lately reported.

A gentleman, aged fifty-six, was away from home, and was dressing in the morning, when his mouth and nose suddenly filled with blood. He then became aware that his false teeth, which he seldom removed at night, were missing. He fancied he felt them in his pharynx, and imagined he had swallowed them during sleep. He became greatly alarmed, and immediately sent for my partner, Mr. Atkins, to whom he told the above story, and drew his attention to a hard swelling behind the larynx. Mr. Atkins examined this, which was certainly suspicious, and thrust his finger as far down the throat as possible without feeling anything internally. The patient persisting that the teeth were in the pharynx, I was telegraphed for, to bring instruments, &c.

When I arrived I found the patient in bed, with intense anxiety depicted on his countenance, with a rapid, small pulse; and, when I asked him a question, he motioned for pen and paper to communicate with me. Neither I nor Mr. Atkins could now discover any external swelling, though the patient implied by gesture that it was apparent to his own touch. I examined him with the laryngoscope with difficulty, the throat being very sensitive; and, seeing no signs of the missing teeth, I asked him why he could not speak, when he replied, "Oh! I can speak; but Mr. Atkins told me not to talk." I now introduced a probang into the throat, and the patient said he felt me touch the teeth, just behind the cricoid cartilage. I was afraid to attempt to push the probang forward, as the teeth were described as almost a complete set of lower molars; so I bent a 10-inch military silver probe and hoped to hook the teeth up. I once or twice struck something which felt hard, and the patient then said that I moved them, but the spasms both of pharynx and larynx were so severe, and the amount of glairy mucus ejected was so great, I had scarcely got the probe down before I had to withdraw it. After a few more explorations I came to the conclusion that it was an elongated horn of the hyoid bone and no foreign body that I struck against, and I was confirmed in this opinion by finding that the patient could swallow fluids without any difficulty. I told him I thought he was mistaken, and ordered a search of the room, when shortly the missing teeth were found on the top of a chest of drawers.

The patient's surprise may be imagined. All his symptoms immediately disappeared; he dressed and ate an excellent lunch.

My explanation of this curious case is that the patient's nose commenced bleeding when he was dressing; this first drew his attention to the absence of his teeth. He forgot he removed them the night before; being in a strange house did not know where to look for them. There was probably a clot of blood in the pharynx, and this imagination magnified into the teeth. Some spasm of the pharynx produced the hardness he and Mr. Atkins felt on arrival. The rest was purely the effect of a fixed idea, which in this case was fortunately removable by the production of the supposed cause; had that not been possible, I can quite understand, from the nervous condition of the patient, that even the dreadful symptoms of hydrophobia might (had that been the fixed idea) have been produced, the excessive secretion from the pharynx having already commenced.—Yours obediently,

E. M. WRENCH, F.R.C.S. Exam.

Barlow Dec. 20th, 1879.

ARMY MEDICAL DEPARTMENT.

To the Editor of THE LANCET.

SIR,—Though unwilling to trouble you so soon again, I should like to ask space for a few lines in reply to "Verax," whose letter in your pages of the 3rd instant brings numerous charges against those whose opinions happen to differ from his own, such as being captious, illogical, &c., culminating in an accusation of "bad taste."

Now, it would not be difficult to show that Verax's letter is not a model of close reasoning. Allow me a brief analysis of it.

It has been agreed on all hands that pay and pension have been increased (the former unasked for), and, in the case of several grades, liberally. Even as regards those items, however, all have not the same occasion for showing "gushing gratitude."

What are the pecuniary benefits received by surgeons-major of twenty years' service and upwards, should they not happen to be among the chosen ones for whom "selection" has been re-invented? Answer—One shilling a day of additional pay, and two shillings and sixpence a day increase of pension, after a quarter of a century's service. The latter is granted subject to the condition of its recipient not being free, even on retirement, but still subject to Whitehall-yard; restricted, so far as we know, to residence in these islands, and debarred from the privilege of commuting pension—a loss greater, in the opinion of many, than the gain.

Sick leave has been, nominally, extended. A medical officer cannot claim the privilege on the decision of a Medical Board. It may be a matter of favour, and we have good reason to dread any weakness in definition of the privileges conferred by Warrant. Besides, we are not treated as other officers, whose sick leave is not thus carefully hedged.

Exchanges were allowed before, and there is nothing in the Warrant to make them more or less subject to favour than they were.

The terms of Indian service qualifying for promotion were known before, though known too late for the unfortunate victims of previous official injustice.

Forage granted is an undoubted grievance remedied.

Soldier servants were allowed before, though not from the Army Hospital Corps. This concession now is only nominal. The men have to forfeit the extra pay of their corps, which no soldier worth having as a servant can be expected to do, unless the medical officer, in addition to giving the usual servant's wage, makes up to him the difference of pay. This is not putting us on a par with other officers.

So much for the summary of "Verax"; but there is much in the Warrant, besides, open to adverse comment, such as our brigade depôts being given to half-pay officers and militia surgeons, confining the Army Medical Department to large stations at home, and thus greatly increasing the proportion of foreign service, &c., for which I cannot expect to find space in your correspondence columns.

The quotation about Cæsar of this logician seems to be "*apropos* of nothing"; but our Warrant has certainly introduced a more pronounced form of Cæsarism into the department than has prevailed since the time of Mr. Alexander's great "selection," which stopped the flow of regular promotion, and produced as great a "carping spirit of distrust" as that of which "Verax" and his friends complain.

What would be thought of a Warrant instituting selection in the other scientific corps, and making the promotion of field officers of the Royal Artillery and Royal Engineers to depend on favour, instead of on seniority and right?

But I fear my letter is already too long.

I am, Sir, yours, &c.,

Y.

To the Editor of THE LANCET.

SIR,—I can hardly expect you to open your columns to a controversy between myself and your correspondent "G.," but I should like to inform him that social position has never yet been and never can be conferred by Royal Warrant. It must be and can be only earned by the personal acquirements and merits of medical officers of the army, as the social position of combatant officers has been well and gallantly earned. The latter position, however, differs essentially in kind, though not in degree, from that to which medical officers should aspire, and in striving after purely military status medical officers simply render themselves ridiculous, and reduce themselves to the condition of the "Military Medical Snob" so graphically described by Thackeray.

"G.," if he be a military medical officer at all, can hardly fail to remember the bickerings and heart-burnings to which the aspirations of regimental medical officers for acknowledgment of the privileges which they claimed on the strength of their relative rank gave rise, and how jealously every position of precedence was hedged in by the "happy family" regimental system.

By his statement that in the new Warrant the head-quarters staff have taken good care of themselves, "Y." plainly shows that his dislike to the head-quarter staff is more powerful than is the accuracy of his estimate of the results of the so-called money Warrant. He will probably be surprised to hear that under the new Warrant the senior members of the head-quarter staff are serving at an actual loss as compared with the amount of their pay and allowances at any of the home military stations, and that the junior members draw a very slightly increased rate of pay quite incommensurate with the greater expenses of house-rent, and travelling on duty through London and its outskirts.

I may add that the Director-General is not only the best-abused but for so far the worst-paid man in the Army Medical Department.—I am, Sir, yours, &c.,

December 21st, 1879. SURGEON-MAJOR.

THE CHILDREN'S HOSPITAL, PENDLEBURY.

To the Editor of THE LANCET.

SIR,—The resignation of Dr. Humphreys, and the extraordinary action of a section of the Board of the Children's Hospital, Pendlebury, Manchester, towards him, as reported in his letter in your columns of Dec. 20th, reopen the question of the management of that hospital, which was discussed by myself and others in letters published in your journal about three years ago. The management of the hospital, whilst producing a feeling of dissatisfaction amongst the subscribers, is of still greater importance to those members of the medical prosession who are tempted to accept office there.

The lists of vice-presidents (about twenty), honorary surgeons, and the like, are purely ornamental, the gentlemen so named having really nothing to do with the institution, and most of them having probably forgotten even that they have allowed their names to be thus made use of.

I am, Sir, yours obediently,

CH. A. RAYNE, M.B. Lond.

Stoke, Devonport, Jan. 6th, 1880.

SANITARY CONDITION OF DUBLIN.

To the Editor of THE LANCET.

SIR,—The mortality of the city of Dublin has risen to 48·9 per thousand, to the great discredit of the public and local authorities. It is idle to appoint Royal Commissions to inquire into that which is known to all and is apparent to the meanest capacity. Ill-paved and dirty streets, bad sewers, and a large portion of the population living in cellars, underground kitchens, and habitations not fit for any human being to dwell in, represent features fraught with danger to Dublin. The Corporation should long since have removed these evils, but they plead that they have not the funds, whilst they expend upwards of £20,000 per annum in the paying and pensioning of numerous officials, and have within the last few years raised the salaries of some of these from 50 to 100 per cent. There appears no remedy for this state of things; it is vain to apply to the authorities. There is but one resource—namely, the public press, and especially THE LANCET, the veteran reformer.

Yours obediently,

Jan. 3rd, 1880. ALPHA.

ON the 1st inst. the Medical Board of the Meath Hospital, Dublin, presented a valuable gold watch to Wm. E. Crozier, L.R.C.S.I., the house-surgeon and resident medical officer to the hospital, as a token of their esteem and regard.

EDINBURGH.

(From our own Correspondent.)

So far as it has gone, the present session at Edinburgh has been eminently successful, the splendid series of pavilions at Lauriston, which constitute the new infirmary, doubtless contributing to swell the annual increase in the number of students. In the hospital there have been many interesting operations, and, I regret to add, one unfortunate death under chloroform. The large airy wards, well-ventilated corridors, and lavatories, present a marked contrast to the dingy low roofs, whitewashed walls, and stone floors, that witnessed so many of the greatest triumphs of surgery and medicine in the venerable pile of buildings so lately vacated. A lock ward will be thrown open next week, and the Pathological department is being pushed forward rapidly towards completion. Already it is found that some of the clinical class-rooms in the new hospital are much too small; and one must own that the large operating theatre is decidedly inferior to that of the old infirmary.

If the lecture-rooms in the new hospital are too small, it is easy to imagine the cramped state of affairs in the University. Here we find that the Professor of Physiology, like his botanical colleague last summer, has had to re-deliver his lecture daily; however, after the holidays this will be obviated, since the class will then meet in the large lecture hall of the Museum of Science and Art, and I also learn that the Government purpose building a new class-room in the Botanical Gardens. In the Anatomical department the same crowding is visible; several students who joined the dissecting rooms in November only received parts a week ago, while the Professor of Midwifery is at present lecturing to his largest class. The same activity prevails in some departments of the extra-mural school. In this state of affairs it is encouraging to know that the new university buildings, which lie alongside the new infirmary, are rapidly progressing, so that it is probable they may be occupied by the medical faculty before another winter session begins, and thus even the rush of enthusiastic medicals along the various short cuts and crowded thoroughfares on their road to hospital will in future give place to a smart walk of a few hundred yards.

THE LAST OF THE ZULU WAR.

(From our own Correspondent.)

In continuation of my short medical history of the Zulu people, I now add that, besides the scarification of the skin over the seat of suffering, live charcoal is sometimes applied to the surface—e. g.: Chief Jantzie's son and heir came under my notice at Fort Chelmsford. He was suffering from violent delirium, and, from what I could gather from this native prince's father, he had been in this state two or three days. The patient had been scarified about the forehead, neck, back, loins, arms, and legs—about a dozen cuts at various intervals; into these had been rubbed gunpowder and clay; the clay was of a reddish colour. A small spot about the size of a two-shilling-piece had been shaved on the crown of the head, and on to this spot had been placed a piece of live charcoal; the scalp was burned deeply. The medicine administered consisted of powdered roots—bark and earth. This was prepared as follows:—A clay pan is made red-hot, the powder is placed in the centre, and water is poured little by little upon the powder, the whole boiling up together, the muti man gravely stirring the same; the medicine presenting the appearance of burned sugar frothing up when heated. Into this hot liquid the patient's fingers were dipped—the tips only; they were then conveyed quickly to the tongue, which the patient was induced to protrude. This was repeated many times, until the patient was bathed in perspiration. The doctor was employed stirring up the medicine and directing its use, &c. This finished, the patient was placed in the sun, lightly covered with a blanket. The efforts of the native muti man having failed to produce any satisfactory effect the case was placed by direction of the father under the care of a white muti man; but, in spite of this change, the barbarous treatment was again and again introduced. It seemed as though there was a feeling of distrust, and that it would be better for the patient to have the mixture of the white and black doctors, as the chief said, "It gives my son a double chance, and my tribe will be more satisfied." Although assured to the contrary, as might be expected, the patient died between them. One knowing fellow observed that death was caused by the white muti[1] and black muti fighting in the deceased's body.

Another proceeding was followed besides the treatment mentioned above, and this practice amongst the Zulus here and in Zululand is very common indeed. A cow's horn, which has the smaller end cut off and rounded, with a small hole about the size of a quill communicating with the interior, is inserted into the anus; the mouth of the horn being held up, water, or salt-and-water, or sea-water, is poured into the horn. The patient is usually in a kneeling posture resting upon the elbows; in the case described above the patient was placed upon his face. The practice is commonly carried out on the sea-shore. Frequently the patient gets up directly the full amount of water is introduced, which in some cases is two quarts or even more, and, holding the parts (the horn being previously withdrawn), rushes wildly up and down the sands jumping and sometimes standing upon his head; the water, &c., is then allowed to escape. This proceeding is repeated two or three times.

Emesis is also largely used by the Zulu people; it is practised as follows:—A man will swallow as much water as possible; the quantity is enormous. He will then kneel down and introduce his finger as far down the throat as possible, thus exciting vomiting. This is again and again repeated.

I have learned with much regret that my statement as regards the efficiency of the native cot-bearers, employed to remove the wounded at and after the fight at Ulundi, was erroneous, and I trust you will give me space to correct the error. I now learn that these natives behaved shamefully, and had to be kicked into doing their duty. I hope that my explanation will satisfy you that I had done my best to report the truth of the actual facts, as I then believed, in the first instance, but I was imperfectly informed. This matter is all the more serious, because these men were the only free available force to remove the wounded at the immediate disposal of the Army Medical Staff upon a battle-field.

At Ulundi but three cases of wounded Zulus were attended by the Army Medical Department's officers present. One case underwent amputation, but died soon after; the others recovered.

The Pine Town Convalescent Military Hospital is about to be broken up. The Officer Hospital at Durban was closed last week.

Durban, Nov. 5th, 1879.

[1] Muti, medicine.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the Primary Examination in Anatomy and Physiology at a meeting of the Board of Examiners on Wednesday:—

Thomas R. Mulvany, Bombay; S. Crawshaw, H. Mitchell, J. W. A. Wood, and C. B. Voisey, Manchester; C. A. Woiriga, Bristol; J. H. Wilson, Aberdeen; R. Brown, Newcastle-on-Tyne; F. E. Musgrave, Cambridge; W. O. Maher, Dublin; G. Fox, Leeds; H. Hudson, Sheffield; and F. O. Hodson, Cambridge.

DR. CURTIS, Professor of Natural Philosophy and Registrar in the Queen's College, Galway, has been appointed an Assistant Paid Commissioner of Intermediate Education in Ireland. Dr. Curtis has been an Examiner for Degrees in the Queen's University in Ireland for nearly twenty years, and is also a member of the Endowed School Commission.

DEVONSHIRE HOSPITAL AND BUXTON BATH CHARITY.—The report of the Committee of Management of this institution, presented at the last general meeting, announces the contemplated extension of the hospital to double its former size, and accommodation thus provided for 300 inmates. During the year 1879, 1444 in-patients were admitted, and 199 out-patients received the benefits of the charity. A good practice adopted at this hospital is the giving to every patient on leaving the wards a form printed on a postal card, to be returned, filled up, with information as to the progress of the case. Of these self-reported results, 1065 were received during the year; 765 reported as improved, 305 as no better, and 5 as having terminated fatally.

BEQUESTS ETC. TO MEDICAL CHARITIES.—The executors of the will of Miss Harriet Hurst, of Stamford, have, in the exercise of the discretion vested in them, distributed a large amount in the Three per Cent. Consols, bequeathed by her for the purpose, among various charities, including £5000 to the London Hospital; £3500 to the Middlesex Hospital; £3000 each to University College Hospital, St. George's Hospital, and the Stamford, Rutland, and General Infirmary; £2000 to the Westminster Hospital; £1000 each to the Cancer Hospital, Brompton; Charing-cross Hospital; St. Mary's Hospital; the General Infirmary at Hertford; the Hertfordshire Seaside Convalescent Home; the Wolverhampton and Staffordshire General Hospital; the National Hospital for the Paralysed and Epileptic; the Asylum for Idiots, Earlswood; the Hospital for Sick Children, Great Ormond-street; the Hospital for Consumption, Brompton; and the City of London Truss Society. £500 each to the Huntingdon County Hospital; St. Peter's Hospital for Stone, the Royal Medical Benevolent College; the Royal Free Hospital; the London Lock Hospital; Lincoln Hospital; Kent and Canterbury Hospital; Royal London Ophthalmic Hospital; Metropolitan Convalescent Institution, Walton-on-Thames; Hospital for Women; Evelina Hospital for Sick Children; and the Hitchin Infirmary. £300 each to the Hospital for Diseases of the Skin, Samaritan Free Hospital for Women and Children, and the National Orthopædic Hospital.

Medical Appointments.

ANGIER, G. A., M.D., M.R.C.S.E., L.S.A.L., has been appointed Acting Medical Officer for the Preston District of the Brighton, Hove, and Preston Provident Dispensary, vice Wooldridge, resigned.

ARMSTRONG, J., M.B., L.R.C.S.Ed., has been appointed a Physician to the Liverpool Infirmary for Children, vice Stephens, resigned.

BACOT, W. G., M.D., F.R.C.S.E., has been appointed Public Vaccinator for the No. 1 District of the Blandford Union, vice Ingram, resigned.

BAMPTON, A. H., M.D., C.M., has been appointed House-Surgeon to the South Devon and East Cornwall Hospital, Plymouth, vice Sylvester, resigned.

BERRY, F. H., M.R.C.S.E., has been appointed Second House-Physician to Guy's Hospital, for January.

BLUNT, Mr. T. P., has been appointed Public Analyst for the County of Merioneth, at 21s. per analysis.

BROMLEY, F., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Presteigne District of the Knighton Union, Radnorshire, vice Hanson, resigned.

BROWNE, J. W., M.B., M.R.C.S.E., has been appointed Medical Registrar to the Middlesex Hospital, vice Finlay, resigned on being appointed an Assistant-Physician.

BUCK, J. R., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer to the Worcester Union Workhouse, vice Jeffery, resigned.

BURNET, R. W., M.D., M.R.C.P.I., has been appointed a Physician for Out-patients to the Great Northern Hospital, vice Cracknell, resigned.

CHILCOT, J., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the Mere Union Workhouse, and Medical Officer of Health for the Mere Rural Sanitary District, vice Watson, resigned.

ELLIOT, G. S., M.R.C.P.Ed., F.R.C.S.Ed., has been appointed Medical Superintendent of the Metropolitan Asylum District Asylum, Caterham, at £500 per annum, unfurnished residence, &c., vice Adam, appointed to the Crichton Royal Institution, Dumfries.

FULLER, T. W., M.B., has been appointed Senior House-Physician to Guy's Hospital, for January.

GABBETT, H. S., M.B., L.R.C.S.I., has been appointed Medical Registrar to the London Hospital, vice Warner, appointed an Assistant-Physician.

GAGE, R. C., M.B., C.M., has been appointed Medical Officer, Public Vaccinator, &c., for the Scotstown Dispensary District of the Monaghan Union, at £120 per annum and fees, and £15 per annum as Medical Officer of Health, vice Hall, resigned.

GRIFFITH, W. B., L.R.C.P.Ed., L.R.C.S.Ed., has been reappointed Medical Officer of Health for the Bootle Rural Sanitary District, at £25 for one year.

HALL, C. S., M.R.C.S.E. & L.M., L.S.A.L., has been appointed Medical Officer for the Harraby-hill Workhouse of the Carlisle Union, vice Hay, deceased.

HETHERINGTON G. H., L.R.C.P.L., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Workhouse and No. 8 District of the Woodbridge Union, Suffolk, vice Owen, resigned.

KNIFE, W. M., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Melbourne District of the Shardlow Union, vice Tasker, deceased.

LOWE, H. G., M.R.C.S.E, L.S.A.L., has been appointed Resident Surgical Officer to the General Hospital, Birmingham, vice Hawkins, resigned.

MACKIE, J., junr., M.D., L.R.C.S.Ed., has been appointed Certifying Factory Surgeon for the District of Brechin, Fifeshire, vice J. Mackie, L.R.C.S.Ed., resigned.

MCLAREN, C., M.B., C.M., has been appointed House-Surgeon to the Bury Dispensary, Lancashire, vice Sparrow, resigned.

MACNAB, J., L.R.C.S.Ed. & L.M., has been appointed Certifying Factory Surgeon for the District of Stirling, vice Heath, deceased.

MANSELL, E. R., M.R.C.S.E., has been appointed Second House-Surgeon to Guy's Hospital, for January.

MOFFATT, P., M.D., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the St. Cuthbert District of the Carlisle Union, vice Hay, deceased.

MOULLIN, C. W. M., M.B., M.A., M.R.C.S.E., has been appointed Surgical Registrar to the London Hospital, vice Treves, appointed an Assistant Surgeon.

NOAD, G. W., M.D., M.R.C.S.E., L.S.A.L., has been appointed Certifying Factory Surgeon for the District of Wokingham, Berks, vice Barford, resigned.

ORMEROD, J. A., M.B., M.R.C.P.L., has been appointed a Physician for Out-patients to the Great Northern Hospital, vice Leared, deceased.

PADDISON, E. H., M.B., has been appointed Junior House-Surgeon to Guy's Hospital, for January.

PAGE, E. S., L.F.P.S.G. & L.M., L.S.A.L., has been reappointed Medical Officer to the Infection Hospital, Solihull Union, Warwickshire, at £60 for one year.

PHILLIPS, S. P., M.B., M.R.C.S.E., has been appointed Surgical Registrar to the Middlesex Hospital, vice Lyell, resigned on being appointed an Assistant-Surgeon.

POLAND, J., L.R.C.P.L., M.R.C.S.E., has been appointed Senior House-Physician to Guy's Hospital, for January.

RUSSELL, G. H., M.B., has been appointed Junior House-Physician to Guy's Hospital, for January.

SHANN, W. A., L.R.C.P.L., M.R.C.S.E., has been appointed Resident House-Physician to Addenbrooke's Hospital, Cambridge, vice Fowler, appointed Pathologist and Curator of the Museum, Westminster Hospital.

SHEILD, A. M., M.R.C.S., L.R.C.P.L., has been appointed House-Surgeon to St. George's Hospital, vice Margerison, resigned.

SNELL, E., F.R.C.S.Ed., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the No. 1 District, and Medical Officer to the Workhouse, Radford Union, Notts, vice Hatherly, resigned.

WAINEWRIGHT, R. S., M.R.C.S.E., has been appointed Junior Obstetric Assistant to Guy's Hospital, for January.

WEISS, H. F., L.R.C.P.L., M.R.C.S.E., has been appointed House-Surgeon to the Male and Out-patient Department of the London Lock Hospital, vice Vivian, resigned.

WHITE, W. H., M.B., has been appointed Senior Obstetric Assistant to Guy's Hospital, for January.

WITT, J. F., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Coxwold District of the Easingwold Union, vice Smith, resigned.

Births, Marriages, and Deaths.

BIRTHS.

CLOUTING.—On the 2nd inst., at Thetford, the wife of J. R. Clouting, M.R.C.S.E., of a daughter.

CRAIG.—On the 27th ult., at Pathhead, Ford, Midlothian, the wife of Archibald Craig, M.D., of a son.

EVANS.—On the 26th ult., at West Bromwich, the wife of Alfred Paget Evans, M.R.C.S.E., of a son, still-born.

HARLEY.—On the 2nd inst., at Brook-street, Grosvenor-square, the wife of John Harley, M.D., of a son.

HUDSON.—On the 29th ult., at Clytha-square, Newport, Monmouthshire, the wife of Henry R. Hudson, L.K.Q.C.P.I., of a daughter.

NICHOLLS.—On the 5th ult., at Dominica, West Indies, the wife of H. A. Alford Nicholls, M.D., of a daughter.

SANDILAND.—On the 20th ult., at 191, Southgate-road, N., the wife of A. H. Sandiland, M.R.C.S. & L.R.C.P.L., of a son.

MARRIAGES.

CAPON—ROBERTSON.—On the 30th ult., at St. John's, Paddington, Herbert James Capon, M.D., to Harriet, daughter of the late William Robertson, Esq.

HURFORD—HAYLOCK.—On the 5th inst., at Holy Trinity Church, Paddington, by the Rev. P. Stanley, Cedric Herbert Hurford, B.A., M.D. Trin. Coll. Dub., to Ethel Mary Haylock, youngest daughter of the late John Haylock, of Balsham-place, Cambs.

DEATHS.

FREUND.—On the 29th ult., at 7, West-street, Finsbury-circus, of chronic bronchitis, Jonas Charles Hermann Freund, M.D., Deputy Inspector-General of Hospitals during the Crimean War, Surgeon in the Army, originator of the German Hospital, Dalston, London, eminent as a physician both for rich and poor, deeply regretted, aged 71.

HANCOCK.—On the 1st inst., at Standen House, Chute, Wilts, Henry Hancock, F.R.C.S.E., aged 70.

MAINWARING.—On the 22nd ult., at Dudley, William Mainwaring, L.S.A.L., aged 80.

PONSFORD.—On the 30th ult., at University College Hospital, from blood-poisoning contracted in the discharge of his duties as Physician's-Assistant, Leicester, Cuthbertson Ponsford, aged 23.

POWELL.—On the 27th ult., at Parkmore, Roscrea, co. Tipperary, John Allman Powell, L.K.Q.C.P.I.

SCOTT.—On the 2nd inst., at Clifton House, Beeston-hill, Holbeck, Leeds, William Scott, M.R.C.S.E.

SHIRRES.—On the 20th ult., at Gateshead, David Shirres, L.R.C.P.Ed., aged 35.

TAYLOR.—On the 28th ult., at Easton, Elgin, Dr. James Taylor, formerly of the Hon. East India Company's Service, aged 76.

WOLLETT.—On the 18th ult., at Monmouth, John Moore Wollett, Surgeon, J.P., aged 66. R.I.P.

YONGE.—On the 25th ult., at Liskeard, John Francis Duke Yonge, M.D., aged 65.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8 a.m. by Stewart's Instruments.)

THE LANCET OFFICE, Jan. 8th, 1880.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radia in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Jan. 2	30·07	W.[1]	52	50	..	53	48	..[5]	Cloudy
,, 3	30·49	S.W.	41	40	..	49	38	..	Fine
,, 4	30·59	N.W.	42	40	..	45	38	..	Fine
,, 5	30·50	S.	39	38	..	43	36	..	Foggy
,, 6	30·57	S.	35	33	..	38	33	..	Overcast
,, 7	30·06	S.	36	35	..	39	32	..	Overcast
,, 8	30·58	S.	34	33	..	35	31	..	Raining

Notes, Short Comments, and Answers to Correspondents.

DIRT AND BODILY HEAT.

THE part which the skin plays in the regulation of bodily heat is not adequately estimated. The envelope of complicated structure and vital function which covers the body, and which nature has destined to perform a large share of the labour of health-preserving, is practically thrown out of use by our habit of loading it with clothes. It is needless to complicate matters by allowing it to be choked and encumbered with dirt. If the skin of an animal be coated with an impervious varnish, death must ensue. A covering of dirt is only less inimical to life. We are not now speaking of dirt such as offends the sense of decency, but of those accumulations of exuded matter with which the skin must become loaded if it is habitually covered and not thoroughly cleansed. The cold bath is *not* a cleansing agent. A man may bathe daily and use his bath-towel even roughly, but remain as dirty to all practical intents as though he eschewed cleanliness; indeed the physical evil of dirt is more likely to ensue because, if wholly neglected, the skin would cast off its excrementitious matter by periodic perspirations with desquamation of the cuticle. Nothing but a frequent washing in water of, at least, equal temperature with the skin and soap can ensure a free and healthy surface. The feet require especial care, and it is too much the practice to neglect them. The omission of daily washings with soap and the wearing of foot-coverings so tight as to compress the bloodvessels and retard the circulation of the blood through the extremities, are the most common causes of cold feet. The remedy is obvious: dress loosely and wash frequently.

Legal.—The question is a complicated and a legal one, on which we are scarcely prepared to express an opinion before hearing all the facts of the case and the argument thereupon.

Mr. J. A. Ormerod.—We shall be glad to see the paper proposed. Yes.

INTUSSUSCEPTION OF THE CÆCUM.

To the Editor of THE LANCET.

SIR,—A week ago I received a communication (for which I beg to return thanks to my anonymous correspondent), to the effect that in vol. x. of the Transactions of the Pathological Society of London, at page 160, there would be found recorded a case similar to that of Intussusception of the Cæcum &c., published in your number of Dec. 20th, 1879. Having since procured the volume in question, kindly lent me from the library of the Leeds School of Medicine, it might not be without interest to some of your readers were I, with your permission, to recall the principal features of that case, as they differ in certain respects from mine.

The patient was a boy, five years of age, under the care of Mr. Heslrige Buckby, of Sutton-on-Trent, and the portion of bowel discharged, as exhibited before the Society by Dr. Quain, consisted, besides the cæcum, of about eight inches of the ileum and four of the colon; whereas in my case there were only the extremities of these viscera at their junction with the cæcum. The boy had been ill four months, presenting at first symptoms of simple fever, followed by severe pain of an intermittent character, chiefly in the region of the bladder. This pain was somewhat relieved by pressure, but not entirely removed, when most severe, even by grain doses of opium every four hours. The urine was at times suppressed for forty-eight hours, sometimes passed freely and copiously, sometimes with pain. The bowels were very much confined, but he passed no blood; there was sickness, but no stercoraceous vomiting, and the sickness was checked by the internal use of chloroform. His appetite was sometimes voracious. The discharge of the portions of bowel was preceded and followed by diarrhœa, and there was then an end to all the distressing symptoms, the urine being passed freely and painlessly, and the bowels passing natural motions once a day; so that at the end of six weeks the little patient seemed in perfectly good health, and continued so at least up to August, 1879.

I remain, Sir, yours &c.,

Bramley, Jan. 3rd, 1880. CHARLES SLESSER.

"TIGHT-LACING" AGAIN.

SURELY enough has been written and said on the subject of tight-lacing to make it plain to everyone gifted with common sense that danger must attend the process. The notion of "improving" nature by forcing the feet into tight boots and the divers other devices with which fashion beguiles the love of personal embellishment are sufficiently monstrous; but the audacity of attempting to compress the trunk, which contains the central organs of life, "*for* the sake of appearances," surpasses belief. We are not greatly interested to impress the minds of beings so unreasoning and unreasonable as those who resort to this artifice in the face of all that has been done to warn the public. Perhaps the recent death from tight-lacing, in which the heart was found to be so impeded in its action as to render life impracticable, may have some deterrent effect; but we doubt it. Fashion will prevail and wasp-like waists will be cultivated in defiance of nature and art. The flat-headed Indians compress their heads; but they allow for a compensating expansion in one direction while they restrain in another. It is still open to the fashion-loving women of England to try the experiment of enclosing the heads of female children in rigid caps when young; albeit there can be no need to adopt artificial measures for the repression of feminine brains.

DR. T. HUNTER'S OPERATION ON SIR W. WYNNE.

To the Editor of THE LANCET.

SIR,—Through the kindness of D. E. Kirkby, Esq., J.P., I have had the pleasure of reading the original letter of the late Dr. T. Hunter (*of* which the enclosed is a *copy*), and also of examining the grape-shot therein described. Such a severe operation, so difficult and so protracted—undertaken, too, long before the discovery of chloroform and the antiseptic treatment,—presents numerous points of interest; and I feel sure that if this account has not appeared in THE LANCET, you will be pleased to insert it. I may add that Lieut. (afterwards Sir) W. Wynne lived to the ripe old age of eighty-four years.

I am, Sir, yours &c.,

Aberdovey, Dec. 1879. F. H. V. GROSHOLZ, L.K.Q.C.P.I., &c.

Dr. Hunter's Report of the Operation on Sir Wm. Wynne on Dec. 12th, 1799.

Hull, Dec. 30th, 1799.

I do hereby certify that I first visited Lt. Wynne on Dec. 2nd, who was considered as a dying man by all the physicians and surgeons of this place who had seen him, and it was only in consequence of his being in the 17th Regiment, many of the officers of which I had known very intimately while in St. Domingo, that I was induced to visit him, rather from motives of politeness than the hope of being serviceable to him. I found him in the most deplorable state of debility and emaciation, coughing up at least a pint of purulent matter daily from his lungs, attended by violent hectic fever and other symptoms, which but too clearly denoted his approaching dissolution. All these symptoms appeared evidently to me to be the consequence of a wound in his side, received, as he informed me, on the 2nd October in Holland. After examining the wound, which externally was now nearly healed up, I judged it proper to lay it open, thus endeavouring to trace the progress of the ball, but without effect. A few days after I made another incision into his side; but I was still unsuccessful in my attempt to detect the cause of so much mischief. On the 11th, however, the matter, which passing through his lungs had ceased to flow out at the external wound, now made its appearance there, and a probe being introduced at the orifice from whence it issued, a ball was discovered at the depth of several inches. On the 12th I proceeded to extract the ball. After making a large and deep incision into the cavity of the chest, I found the ball, much too large to pass between the interstices of the ribs. Two of the ribs had evidently been fractured by the ball in its passage into the lungs, but were now healed; besides it is easy to imagine that the force of gunpowder will put in what more manual force cannot take out. I was thus under the necessity of sawing away a large portion of the rib to make room for the passage of the ball, which, being composed of iron, rendered the operation much more tedious from its very frequently eluding the grasp of the extracting instrument. After much practice during the present war in gunshot wounds, I can without hesitation pronounce Mr. Wynne's case to be the most important I have ever had under my care, and the operation to be one of the most difficult I ever performed, which but for the unshaken fortitude of the unfortunate sufferer could not have been effected. Those who know the high importance of the lungs to animal life, and are capable of appreciating the great injury they must have sustained by the lodgment of so large a substance so deeply seated, and for such a length of time, will be more capable of conceiving than I of describing the acute sufferings both of the mind and body which Mr. Wynne has of necessity undergone. As Mr. Wynne has frequently asked me my real opinion of his actual situation, and as he has appeared to me to possess a firm mind capable of hearing truth, I have not attempted to conceal from him that, though he is now much better, and I fervently hope likely to recover, yet he is still, and must for a considerable time be, in a dangerous and precarious state.

T. HUNTER, M.D., Surgeon to the Forces.

The grape-shot that was extracted from Lt. Wynne's lungs weighs three ounces and a half and three grains; it was weighed in the presence of Lt.-Colonel Cooke, of the 5th West York. T. H.

THE ABORIGINES OF AUSTRALIA.

THE *Argus* (Melbourne) gives a most melancholy account of the present state of the aborigines in Victoria. It would appear from our contemporary that the attention which has of late been given to them by the Government to arrest their rapid decadence has been futile. Nay more, it is even suggested that, much as drink and debauchery may have contributed towards the degeneration of the native race, the "greatest mischief has been worked by the blanket and the potato." In other words, the very care which the Government has given to the aborigines with a view of arresting degeneration has accelerated it. This paradoxical statement of a painful subject is, no doubt, susceptible of a clear explanation. The *Argus* notes with approval that the Board for the Protection of the Aborigines proposes to ask Mr. W. Thomson, F.R.C.S., of South Yarra, to investigate the causes of the progressive degeneration of the native race. Mr. Thomson is the author of a work on "Typhoid Fever in Melbourne," which we had occasion to review very favourably a short time ago; he is also the author of a work entitled "Phthisis, and the supposed Influence of Climate in Australia." Phthisis would appear to be the chief cause of death among the aborigines, hence Mr. Thomson would bring special qualifications to the task of investigating their decadence. It does not appear that Mr. Thomson had at the date of the latest news accepted the duty required of him; but we may express a hope that he has done so. In that case we shall look with much interest for the results of his investigation of a difficult question.

Mr. J. Dutto.—We do not recommend any physician or surgeon in particular. Our correspondent should consult his own medical adviser on the matter.

INTRAVENOUS INJECTION OF MILK.

To the Editor of THE LANCET.

SIR,—I have lately published five cases[1] in which I transfused milk into the veins. I now add the short notes of three other cases, in the hope that other members of the profession may be led to try its effects, at least in cases for which there is no other hope.

M. C——, aged seventy years, residing at Moynalty, county Meath, came under my care on the 15th of last August. I found her suffering from well-marked pernicious anæmia, complicated with chronic eczema. She was so feeble that she was unable to stand without assistance. Her friends told me they had no hopes of her recovery. On August 19th I injected four and a half ounces of goat's milk at a temperature of 100°. There was some slight difficulty of respiration, and she complained of a sensation of tightness in the head, with severe palpitations. These symptoms subsided in a few hours, and she gradually improved until September 1st, when she was able to leave the London Hotel, where the operation was performed, and return home. She has continued to improve, and is now quite strong.

M. W——, the subject of spinal disease, and phthisis in its last stage. Her case had long since been considered hopeless, and her only anxiety was to be able to be removed home to Carrigallen, county Leitrim, a distance of some fifty miles. Yielding to the earnest entreaties of her friends, I, on the 19th of August, injected four ounces of milk into the median basilic vein of the left arm. The operation stopped the diarrhœa from which she suffered, and she improved much in strength, and a week later she was able to be removed home.

L. N——, the subject of well-marked phthisis in the last stage, came to Dublin from Ballinasloe with the object of having milk transfused into her veins. Hectic fever and diarrhœa had reduced her to the utmost extent. On the 25th of September I transfused four ounces of goat's milk. There was little or no disturbance of respiration, but the temperature rose four degrees. The diarrhœa was completely checked, and did not return for three weeks after the operation. She has considerably improved, and I intend repeating the operation at a later period.

I remain, Sir, yours truly,

AUSTIN MELDON, F.R.C.S.I., &c.,
Surgeon to Jervis-street Hospital.

Merrion-square North, Dublin, 1879.

D. D., (Sandwich.)—Perhaps a little book on the Colonies, published by Silver and Co., of Cornhill, would be useful to our correspondent. Several letters bearing on the subject mentioned appeared in our last volume.

WHAT IS A NUISANCE?

To the Editor of THE LANCET.

SIR,—Are putrid bones in a decomposing mass of some hundreds of tons to be considered a nuisance dangerous to health? Into Ramsgate Harbour a damaged vessel was brought early last week from some foreign port, and on Wednesday, Dec. 31st, the work of transmitting the bones into a hulk was commenced. Clouds of steam ascended from the hold, and the stench may be imagined better than described. This has been continued to the present time. Your opinion will oblige,

Yours obediently,

The Elms, Ramsgate, Jan. 7th, 1880. HENRY JAMES, F.R.C.S.

*** Certainly, and, according to a recent decision of the judges, it would be competent for the local authority to deal with the matter, either as a nuisance or as injurious to public health.—ED. L.

[1] I shall be happy to supply any member of the profession interested in the subject with a copy of the report of the above cases.

W. B. W.—The amount of water present in good ordinary milk is 86 parts in 100, and the percentage of water in the best samples of condensed milk ranges from 19·2 to 21·8. To restore the natural percentage, four pints of water should be added to every pint of condensed milk.

THE NOXIOUS GASES BILL.

To the Editor of THE LANCET.

SIR,—In your interesting leader of the 29th November upon this subject there are some statements which appear to me calculated to convey a wrong impression with respect to one or two matters in which alkali manufacturers are much interested.

The first point, and one of much importance to sanitarians, is the effect upon health of the gases evolved during the manufacture, by the "Le Blanc" process, of soda in its various forms, together with its necessary adjuncts, sulphuric, hydrochloric, and nitric acids, and hypochlorite of lime or bleaching powder. Upon this part of the subject there was, as you are aware, much evidence, medical and otherwise, given before the Royal Commission on Noxious Vapours (which began its sittings in 1876); but this evidence, as a whole, did not show that these gases, as now evolved, are prejudicial to human life, and that this was the opinion of the Commissioners will appear from page 26, lines 32 to 37, of their Report, which reads as follows:—"The evidence given as to the alleged high death-rates in certain parts of Liverpool and in towns on the banks of the Tyne is encountered in the case of Widnes and Swansea by equally specific evidence as to the low death-rates and general healthy character of the population of these towns, and especially of that portion of the population engaged in the works or residing in their immediate neighbourhood."

Secondly. You speak of the gases evolved in the manufacture of sulphuric acid and from the deposit of alkali "waste" as being "two widespread and intolerable evils." With respect to the gas evolved in the manufacture of sulphuric acid, it was abundantly shown before the Royal Commission that in well-conducted works the escape of such gases is extremely small, not to be compared to the amount given off, even in the same works, by the combustion of coal. It must be remembered that the object of the manufacturer is to catch and use these gases, and that he will naturally strive to reduce the loss to a low point. The Act of 1874 provides that the "best practicable means" for the condensation of these gases should be used in all works, and, in the opinion of most manufacturers, this provision is sufficient for the purpose. However, the Bill of last session went further, and for the first time proposed that a maximum limit of escape should be fixed. To this in principle the alkali trade made no objection. With respect to the second—that is, sulphuretted hydrogen,—all are agreed that the escape of this gas from "waste" deposits *outside* works should be brought under the inspector's control. Waste deposits *inside* works are so now, and why the outside ones were omitted from the Act of 1874 is difficult to understand. It is this unfortunate omission that has led to the "widespread and intolerable evil" of which you speak. Sulphuretted hydrogen travels a long way, and is most unpleasant even when extremely dilute. "Waste," however, can be deposited so as to avoid this nuisance, and it should be the duty of the inspector to see that it is so deposited. When this is done, the second of the "intolerable evils" will have vanished. I may remark that the gases escaping from these waste heaps, disgusting as they are, have not been shown to have any injurious effect upon the public health.

After describing the four parts of the Bill, which were really developments and extensions of the present Alkali Acts, you go on to speak of the particulars in which this Bill went beyond its predecessors, and speak of these provisions as "of vital moment, and not to be surrendered." These provisions were two—the one, the 27th, which proposed to set the local authority in motion; the other, the 29th, which had for its object the establishing of "collective liability" of manufacturers. The first of these two is objectionable, chiefly from the fact that local authorities are generally composed of persons too directly interested in the case to act with impartiality. If the local body is composed of men hostile to the manufacturers, the action taken would be liable to be vexatious; if the local body is friendly to the manufacturers, the clause might become a dead letter, as the Smoke Act is now in many towns. The manufacturers have for this and other reasons always insisted that the inspector alone should set the law in action, and that the inspector should be a scientific man, of independent position, employed by, and responsible only to, the central authority. The second of these two clauses deals with the question of "collective liability." This subject is really a legal one, and is of no special interest to sanitarians. I will, therefore, content myself with saying that it is in direct defiance of the deliberate recommendation of the Royal Commissioners, and that, in my opinion, its tendency would be prejudicial to the interests of the public, and ruinous to the manufacturer.

One word in conclusion. The alkali trade has abundantly shown by its action in 1862 and in 1874, and by the evidence given before the Royal Commissioners, that its object is not to obstruct, but to assist, legislation in the minimising of the evils complained of. Manufacturers are, as you justly say, anxious that inspection should be *thorough*; in short, they wish for all reasonable regulations to be fully and impartially enforced; but they will always protest against legislation such as that embodied in the 29th clause of the recent Bill as tending to ruin their trade, and as hostile to the true interests of the country.

Yours truly,

Widnes, Dec. 29th, 1879. EUSTACE CAREY.

THE GLASGOW MORTALITY TABLES.

THE quarterly observations of the medical officer of health for Glasgow, Dr. Jas. B. Russell, on the mortality tables of the city, now reach us in a form which must greatly enhance their utility and the ease of reference to them. Previously the tables appeared, detached from the medical officer's "remarks," in Brobdingnagian sheets, unmanageable by mortals of the present prevailing stature. We took occasion more than once to protest against the unhandiness of this form of publication—a form, moreover, exceedingly inconvenient for the library. The "remarks" of the medical officer on the mortality tables for the quarter ending the 30th September, 1879, now lie before us, and we are glad to observe that the tables are printed with them in a form convenient for reference, and which will enable them to be bound up with the "remarks."

A COMMUNICATION from *Dr. Cameron, M.P.*, arrived as we were going to press. It shall receive attention next week.

THERAPEUTIC EFFECTS OF LIGHTNING UPON CANCER.

To the Editor of THE LANCET.

SIR,—As I am not aware that the records of the healing art furnish any case of cancer having yielded to the influence of lightning, I venture to draw the attention of the numerous readers of THE LANCET to the following remarkable case, which may awaken due interest in the curative value of electricity in diseases of a malignant type. Many years ago I heard the late Dr. Golding Bird express an opinion to the effect that electrical sparks drawn from a cancerous structure until an eruption is produced was the only reliable means of cure which he could endorse. In confirmation of the theory of the celebrated electrician, I beg to submit an extraordinary instance of the therapeutic freaks of atmospherical electricity in the cure of cancer. The case loses none of its interest on the plea of antiquity.

About thirty years ago, I attended Reuben S——, a farm labourer, residing at Langtoft, on the Yorkshire Wolds, who suffered from cancer of the inferior lip and part of the chin for about a year, and who had agreed to an operation for their removal. In the meantime he undertook to assist a poor farmer for a day in ploughing his land. During this occupation he was struck down by lightning, and carried home in a state of insensibility. Both of his horses were killed, and the wooden beam of the plough was split and reduced to considerable fragments. Soon after the occurrence I visited, and found the ploughman in a state of great prostration, and emitting a strong odour of ozone, indicating electrical condensation of the adherent oxygen. As soon as reaction took place I bled him from the arm, which act constituted the whole of the treatment. What seems to be the most astonishing feature in the case is the healing process which was set up in the lip and chin soon after the accident. The cancer gradually lessened, and in a few weeks every trace of the diseased structure disappeared, and for ten years he enjoyed complete freedom from his former suffering and signs of the disease. In proof of the specific and hereditary character of the disorder, I may state that the patient's granddaughter, Mrs. P——, of Driffield, lately became the subject of a cancerous tumour over the larynx, which growth, assisted by Dr. Eames, I removed successfully a few weeks ago, and under the persistent use of arsenical treatment the cure seems to be satisfactory. In S——'s case the electrical fluid seemed to form and pass through two small holes in the head-band of his trousers, and to make its exit by corresponding apertures. After this remarkable exemption from all cancerous development for so long a period, the disease reappeared, and, after a year of intense suffering, proved fatal; still leaving the inference unaffected, that the imponderable element secured for the patient an extension of life, and ten years' relief from the distressing consequences of carcinoma, which circumstance establishes my faith in the therapeutic power of electricity in scirrhous indurations.

From the foregoing representation, it is evident that frictional electricity may in good hands become one of the most powerful therapeutic agents in the dispersion of cancerous formations. When cellular hypertrophy takes place in localities favourable to the development of epithelial disease, frictional electricity might be employed for the purpose of destroying the morbid cells, whether in their incipient or advanced stages of progression. The authorities of the London Cancer Hospital will be unfaithful to their honourable trust should they decline to test to the fullest extent the curative effects of frictional electricity in some of the most hopeless variety of diseases to which humanity is exposed.

I shall not venture upon any theory of the specific action of electricity on morbid depositions, but consign the whole question to the abler readers of your incomparable journal.

I remain, Sir, yours &c.,

A. ALLISON, M.D.,
Senior Surgeon to the Lloyd Cottage Hospital,
Bridlington. Bridlington.

Africa.—"Life on the Gold Coast," by Surgeon-General Gordon, C.B., a small work of about 100 pages, published in 1874 by Messrs. Baillière, Tindall, and Cox.

Mr. C. G. Leacock.—The conduct complained of by our correspondent could scarcely be too severely condemned; but he has not quite proved that it occurred.

L.R.C.P. Lond.—Not aware. The inquiry might be addressed to the Deputy Grand Master.

MEDICAL CERTIFICATES TO CLUB MEMBERS, SCHOOL BOARDS, ETC.

"A HOSPITAL SURGEON," complains of the time and trouble he requires to spend in writing certificates for members of clubs, and asks, if the clubs think it necessary to have these certificates, why do they not provide a medical officer of their own to undertake the duty of giving them? The grievance is genuine. Almost a more frequent one is the constant demand for certificates that School Board children, with one complaint or another, are unfit to attend school. Considering how much Board schools may be hindered in their work and efficiency by infectious disease, it is seriously worth the consideration of the Board whether each school should not have its medical adviser to see doubtful cases and advise as to the best course to be taken with a view to the general health of the school.

WOUNDS OF TENDONS.

To the Editor of THE LANCET.

SIR,—The following case may be of interest, showing as it does the perfect way in which tendons are repaired after division, without affecting movement.

During the evening of March 23rd, 1879, one of the officers of this ship fell, his left hand going through a pane of glass. The result was a clean cut wound extending across the front of the forearm, about an inch and a half above the wrist. The tendons of the superficial layer of muscles (the pronator radii teres being, of course, excepted) were completely divided, the distal ends bulging through the wound, the proximal ends being retracted. The radial and ulnar arteries were seen pulsating, but were intact. With the assistance of Dr. Walsh, of the ss. *Goutier*, I returned, with much difficulty, the protruding tendons to their sheaths, and brought the edges of the wound together with silver sutures. A pad of dry lint was applied over the arm, and the whole hand and forearm was bandaged, the hand being kept fully flexed.

Result.—The wound healed up rapidly without any constitutional symptoms. Passive movement was commenced after a fortnight, and in three months the patient reported his hand as "nearly as strong as ever it was." At this date there is not *the least* impairment of movement, and the left hand and forearm are *as* well developed as the right.

Your obedient servant,

SAYER NICKOLL, M.R.C.S.E.

P & O.S.S. *Siam*, Bombay, Nov. 11th, 1879.

Phthisis.—The quantity named in our annotation is that recommended—viz., one per mille of the body weight, and it is to be inhaled as a five per cent. solution twice daily. The vertical pipe of the Siegle's pulveriser must be considerably widened so that the atomising may be facilitated. There is no reference to the plan of treatment in any French or English work. If our correspondent can read German, let him refer to the *Vienna Med. Presse*, 1879, Nos. 37 and 42. The most recent experiences (see *Berliner Klinischen Wochenschrift*, 1879, Nos. 49 and 51) are not favourable.

HÆMORRHAGE DURING PREGNANCY.

To the Editor of THE LANCET.

SIR,—Will you kindly allow me to make the following remarks on the action of ergot on the uterus in connexion with the report of my case published in THE LANCET of Dec. 13th, under the heading of "Hæmorrhage during Pregnancy." Ergot should never be administered to a woman in natural labour, except the os uteri is at the time fully dilated, as, if it is not, its administration has the effect of retarding labour, and, if persisted in, the natural action of the uterus, which is of a clonic character, is superseded by the action of the ergot, and the contractile force becomes tonic, the circulation between the mother and child is stopped, and the child dies. Now, in a case of hæmorrhage during pregnancy the administration of a dose of ergot has the effect of stimulating the uterus to contract sufficiently to control the hæmorrhage, but not to the extent of stopping the circulation between the uterus and fœtus, which, if persisted in, it would do; the fœtus would die, and nature would then step in, and, treating the fœtus as a foreign body, would set up natural uterine action and expel it. Medicines, such as tartar emetic, morphia, &c., have different actions according to the dose given, and this fact has led me to venture upon the above remarks.

I am, Sir, yours faithfully,

Patterdale, Dec. 15th, 1879. F. C. MACNALTY, M.B., &c.

Mr. T. Hall Redwood.—We regret that it is not in our power to supply the information desired.

Mr. W. S. Byrne.—The paper is marked for early insertion. The drawing is in the hands of the engraver.

RETENTION OF CATHETER IN THE BLADDER.

To the Editor of THE LANCET.

SIR,—I would venture to suggest to Dr. Woodward that an even better and certainly more easy way of retaining the catheter in the bladder is by a mode taught me by Mr. T. Smith when I was dresser for him at Bartholomew's—viz., to tie a string round the butt end of the catheter, then to pass one end along each side of the penis, retaining them *in situ* by passing loosely round the penis a strip of adhesive plaster. The above is a plan I always follow, and with success.

Yours faithfully,

Bradford, Dec. 17th, 1879. W. GILCHRIST BURNIE, M.R.C.S.

A NEW DANGER IN RAILWAY TRAVELLING.

To the Editor of THE LANCET.

SIR,—You may have seen mirrors in railway carriages on both sides for reflecting advertisements. I spoke recently to a station-master on the subject, and he agreed with me that a slight collision would bring down with great force a large shower of broken glass on any passengers. I understand a Company has been formed on purpose to supply these mirrors; and as Railway Companies derive a large profit yearly from advertisements, we may expect the mirrors will be generally adopted, and the danger increased. Slight collisions are not unfrequent, and permanent injury to the eyes would be ruin to the majority of passengers. I have noticed these mirrors in first, second, and third class compartments on the Metropolitan, and the London, Brighton, and South Coast Railways.

Trusting that this will not seem unimportant,

I am, Sir, yours faithfully,

Lalcham, South Norwood-park, Jan. 5th, 1880. R. VARLEY.

IT is requested that provincial papers sent for the information of the Editor may be marked so as to direct attention to the medical or sanitary matters it is desired to notice.

LETTERS not noticed in the current week will be dealt with in the next issue of THE LANCET.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Buzzard, London; Mr. Teevan, London; Mr. Leach, Aberdeen; Mr. Ormerod, London; Mr. Cobbe, Greenwich; Dr. Byrne, London; Dr. Patterson, Glasgow; Mr. Sutherland, South Shields; Mr. Whiteford, London; Mr. Allingham, London; Mr. Chubbe, Hull; Mr. Lucas, London; Mr. Amphlett, London; Dr. Barnardo, London; Mrs. Terre, Norwich; Dr. A. Wise, London; Mr. F. Jordan, Birmingham; Mr. Moorhead, Tullamore; Mr. James, Tounghoo, Burmah; Dr. Murphy, Bombay; Dr. Fraser, Azamgarh, India; Mr. Francis, Swansea; Mr. Oglesby, Leeds; Dr. Rayne, Devonport; Dr. J. Williams, London; Mr. Grant, Birmingham; Mr. R. B. Carter, London; Dr. Burnett, London; Mr. Kearney, York; Mr. Goldney, Birkenhead; Mr. Fairbank, Maidenhead; Mr. Dutta, London; Mr. Stride, Brighton; Mr. Fox, Bristol; Mr. M'Hardy; Mr. Larmor; Mr. Haywood, Liverpool; Mr. Croghan, Dublin; Mr. Marks; Mr. Oswald, London; Mr. Cecil, London; Mr. Mallett, London; Mr. M'Coy, London: Mr. Satchell, Tunbridge Wells; Mr. Wigner, London; Mr. Tallack, London; Mr. Cullamore, London; Messrs. Fry and Sons, Bristol; Mr. A. Smith, London; Mr. Saxby, Leominster; Mr. Hubbard, London; Mr. H. James, Ramsgate; Mr. Conolly, Stockbridge; Dr. Pratt, Newport; Mr. Astley, Hungerford; Surgeon Shirley Deakin, Allahabad; Mr. Bradburgh, Brighton; Mr. Shield, London; Dr. Slesser, Bramley; Mr. Johnson, Winchester; Mr. Barley, Norwood; Surgeon-Major Thompson, Warley; Dr. Hollis, Ipswich; Mr. Beyers, Belfast; Mr. Austin, London; Mr. Martin, Ventnor; Mr. Wilson, Eastbourne; Dr. Allison, Bridlington; Dr. Prowse, London; Mr. Brown, Ryfield; Mr. Gabe; Mr. Armstrong, Newcastle-on-Tyne; Mr. Stedman; Mr. Cole, Bath; Dr. Whiteford, New York; Non-Medico; Surgeon; Phthisis; Argol, Grantham; M. D. E.; R. H. G., Caterham; E. G. S.; M. T.; R. W. C.; Alpha; Medical, Putney; D. D.; Practitioner; M.D.; A former Resident at the Cape of Good Hope; Resurgam; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Machin, Bicker; Dr. Hall, London; Mr. Glaisher, Brighton; Mr. Beaman, Wigan; Mr. Wilkins, Scarborough; Mr. Ross, Alderney; Dr. Gill, Stratford-on-Avon; Mr. Baron, Ulceby; Mr. Epworth, Kidderminster; Mr. Grime, Blackburn; Dr. Clapaton, Broughton; Mr. Carlyle, Liverpool; Dr. Johnson, Kirkby Overblow; Mr. Essex, Pontypool; Mr. Buckby, Leicester; Mr. Brown, Tredegar; Messrs. Cadbury and Co., Birmingham; Dr. Jones, Netley; Messrs. Paternoster and Co.; Dr. Hardwicke, Sheffield; Messrs. Maclachlan and Co., Edinburgh; Mr. Vernon, Frome; Dr. Burnett, Mottram; Messrs. Nicholls and Sons, London; Mr. Elmslie, Westbury; Mr. Farrow, Ingham; Mr. Cauldwell, Shotts; X. Y., Brighton; P. A., Torquay; Surgeon, Harborne; A. Z., Amersham; M.D., London; Alpha, London; S. S.; W. E. Cardigan; H. F., Chobham; Surgeon, Bristol; D. B., London; Medicus, London; Omega, Ramsgate; H. C.; A. H., Farningham; P. I. F., London; M.R.C.S.; M.D., Blackburn; A. B., London; Veritas, Newport; M.D., Bristol.

Cambridge Independent Press, Truth, Investment Circular, Colonies and India, Queensland Government Gazette, Nottingham Daily Guardian, Daily Picayune, Runcorn Guardian, North-Eastern Independent, Paper and Print, &c., have been received.

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Medical Diary for the ensuing Week.

Monday, Jan. 12.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.; and on Wednesday, 1½ P.M.
MEDICAL SOCIETY OF LONDON.—8½ P.M. Mr. G. C. Coles will exhibit and demonstrate the Laryngo-phantom.—Dr. Hughlings Jackson, "On a Case of Tumour of the Cerebellum."—Mr. Thomas Bryant, "On the Value of Parallelism of the Lower Extremities in the Treatment of Disease or Injury of the Hip-joint, with the best means of securing it."

Tuesday, Jan. 13.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Schäfer, "On the Physiology of Muscle."
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Adjourned Discussion on Mr. Morris's and Dr. Thin's papers, "On the Connexion of Eczema of the Nipple with Cancer of the Breast."—Mr. F. S. Eve, "On two Cases of direct Dislocation Backwards of the Femur."—Mr. Christopher Heath, "On Aneurism of the Subclavian Artery treated by Amputation at the Shoulder-joint and the Introduction of Needles into the Sac."

Wednesday, Jan. 14.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1 P.M.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
HUNTERIAN SOCIETY.—7½ P.M. Council Meeting.—8 P.M. Dr. Herman, "On a Class of Cases in which Relief may be given by the Use of Vaginal Pessaries."—Dr. Braxton Hicks, "On Lateral Obliquity of the Pregnant Uterus."—Dr. Galabin, "On a Case of unusual Pelvic Deformity."
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens: Ruptured Fallopian Tube, by Dr. Godson; New Instruments, by Dr. Heywood Smith; One-headed Twin Monster, by Dr. Hilliard.—Paper: Dr. Champneys, "On the Pain in Pelvic Cancer, and its Relief by Morphia."

Thursday, Jan. 15.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
ROYAL INSTITUTION.—3 P.M. Mr. H. H. Statham, "On Modern Architecture since the Renaissance."
HARVEIAN SOCIETY.—8½ P.M. Dr. Goodhart, "On Anæmia as a Cause of Heart Disease."—Dr. Broadbent, "On Venesection."

Friday, Jan. 16.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Evening Meeting.—9 P.M. Professor Dewar: "Investigations at High Temperatures."

Saturday, Jan. 17.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Rupert Jones, "On Coal."

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